

1907



**FARM
AND
HOME
MEMORANDUM
CALENDAR
AND
ALMANAC**

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TABLE OF CONTENTS

How to Use This Book	2	Value of Farm Property.	
Rules and Tables on Farm Economy		Principal Incomes of Farms.	
Rules for Landlords and Tenants	3	How Farms Are Operated.	
Distance Apart for Fruit Trees	3	Size of Farms.	
Number of Trees and Plants Per Acre	3	Cash Crops Not Fed to Live Stock.	
Field Crops Planting Table	4	Crops of the U. S. for Seven Years	17
Garden Planting Table	5	What Becomes of the Surplus of U. S.	
Spraying Calendar for 1907	6	Crops	17
Remedies for Seed and Soil Pests	7	Domestic Animals of the U. S.	18
Spraying Formulas for Insecticides	7	Grain and Hay Crops of the U. S.	19
Spraying Formulas for Fungicides	7	Special Crops of the U. S.	20
How to Select and Mix Fertilizers	8	Potatoes. Buckwheat.	
Advantages of Home Mixing.		Tobacco Flaxseed.	
How Crops Show Fertilizer Needs.		Sugar. Cotton.	
Best Mixtures for Various Crops.		Hops. Rice.	
Best Materials for Various Purposes.		Wool Product of the U. S.	20
Fertilizer Needs of Soil	9	Range of Prices on Staple Crops	21
Composition of Fertilizer Mixtures.		Wheat Prices at Chicago.	
Manure Needed for Crops.		Corn Prices at Chicago.	
Fertilizer and Roots of Crops.		Oat Prices at Chicago.	
Elements Used by Various Crops.		Hay Prices at Leading Markets.	
Recipes for Home Mixed Fertilizer	9	Cotton Prices at New York.	
How to Select and Mix Feeds	10	Potato Prices at Boston.	
How to Mix a Balanced Ration.		Apple Prices at New York.	
To Calculate a Ration.		Agricultural Experiment Stations	22
Composition of Common Feeding Stuffs	11	Station Commissioners of Agriculture	22
Feeding Standards for Animals	11	Secretaries of State Boards of Agriculture	22
Guide to Breeding Farm Animals	12	Farmers' Organizations	23
Period of Gestation in Animals		National Associations.	
Common Range of Variation.		Patrons of Husbandry.	
Wolff's Gestation Calendar.		How to Start a Grange.	
Estimating Building Materials	12	Officers of National Grange.	
Common Live Stock Diseases	13		
Marketing Farm Crops	14-15	Household Economy	
Rules for Successful Marketing.		Parlor and Platform Recitations	24
Standard Fruit Packages.		Entertainment for Winter Evenings	25
Shrinkage of Stored Grains.		Looking Into the Future	26
Dealing with Commission Men.		Diseases Common to Infants	27
Market and Market Influences.		Prevention and Cure of Infantile Trouble	28
Free Alcohol Regulations	15	Simple Home Remedies	29
Farm Rules and Measurements	16	Little Domestic Economies	30
Government Land Measure.		Simple Rules for Table Etiquette	31
Rule for Measuring Land.			
Size of Tile Drains.		Memorandum Calendar	
Capacity of Round Silos.		January to December	32-55
Box Measurements and Capacities.		How to Keep Farm Accounts	56
Capacities of Round and Square Cisterns.		Specimen Crop Account	56
Estimates of Materials.		Field Accounts	57-59-61
Farm and Crop Statistics		Live Stock Accounts	58-60
Census Figures on U. S. Farms	17	Cash Account	62
Acreages of Farms.		Summery and Inventory	63
		How to Advertise in F. & H.	64



Memorandum Calendar and Almanac

1907

This book is not sold. It can only be secured by sending 35 cents, which is the club rate for one year's subscription to Farm and Home. That periodical is the most popular semi-monthly agricultural paper of its class in the world, having the largest circulation. The regular subscription price is 50 cents per year singly, or 35 cents in clubs of two or more. Write for other details regarding premiums and club rates.

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How To Use This Book



WITHIN the covers of this small volume are included departments of general information on farm economy, statistics of farm crops, blanks for a daily memorandum, and pages for farm accounts. In the blank space provided under each day in the memorandum calendar the temperature and the condition of the weather may be noted. If the weather is unusually warm or very cold, be sure to put down the temperature. Also note whether the day was marked by showers, snow, hail or fair weather. In the blank space should be kept a few notes on work done during the day, receipts and expenses, when hens were set or stock served, events of family interest, and in fact everything which may be of interest to refer to afterward.

It is also a good thing to look ahead and note engagements on the correct date so that you will not forget the time when these events occur. Also make notes ahead when notes fall due, when bills must be paid, contracts made, renewed or expire, and when your subscription to Farm and Home runs out. Make these notes daily and do not wait until the end of the week to write up your diary. It will only take a minute if done each day, and, if left until the end of the week, you will not remember all of the important events.

In the farm accounts department keep accounts with each class of live stock and each crop, as explained on page 56. This department is by far the most important feature of the whole book, and, if this simple system of keeping accounts is carefully followed out, it will greatly aid in securing success on the farm. In planning your crops for the year and in selecting fertilizers do not fail to refer to the tables on crop planting and the selection of fertilizers. Careful study of these tables may save you many dollars. Also note the instructions on marketing farm crops and be sure that you get all that your crop is worth by making it attractive at marketing time.

Read the pages devoted to household interests and the health of the family frequently and make use of the many valuable hints therein. Don't put this book away in some corner of your desk, but hang it up in the most convenient place where it may be consulted and the records of farm work made daily.

Farm Economy

RULES AND TABLES FOR READY REFERENCE

Don't's for Landlord's and Tenants

Don't rent property except on written lease.

Don't depend on the verbal promises of a landlord.

Don't look to a landlord for general repairs unless specially provided for in the lease.

Don't remove a building, shed, water-trough or pump unless you expect to restore the premises as you found them.

Don't fail to record a lease when drawn for three years or more.

Don't take a married woman for a tenant unless the laws of the State permit her to make an executory contract.

Don't accept any shorter notice than thirty days when holding by the month.

Don't sign a contract which does not state clearly how the crops are to be divided if you are renting for crop rent.

Don't leave your landlord any buildings or sheds erected by you on the premises.

Don't erect a building upon foundations sunken into the ground, or it will become part of the estate.

Don't turn the premises over to the landlord until all questions of ownership of fixtures, additions, etc., have been settled in writing.

Don't try to hold back the rent for repairs made by you.

Don't move into premises until you get your written lease or agreement.

Don't allow a provision not to sublet deter you from putting in a tenant of same standing as yourself.

Don't rent a farm without a clause in the contract reserving the right to enter the premises to make repairs.

Don't rent a farm without a clause in the contract binding the tenant to prevent undue washing of land or wasting manures.

DISTANCES APART FOR FRUIT TREES

Time Required to Bear Fruit, and Age

Fruit	Usual Distances	Time Required to Bear	Average Profitable Age Under High Culture
Apples	30 to 40 ft each way	4-5 yrs. Good crop in about 10 years	25-40 years
" dwarf	10 to 15 ft each way	2-3 yrs. Good crop in 5 years	15-20 years
Blackberry	3x7 to 6x8 ft	1 yr. Good crop in 2-3 years	8-12 years
Currant	4x5 ft	1 yr. Good crop in 2-3 years	20 years
Gooseberry	4x5 ft	1 yr. Good crop in 2-3 years	20 years
Orange and lemon	25-30 ft each way	2-3 yrs. Good crop 2-3 years later	50 or more
Peach	16 to 20 ft each way	2-3 yrs. Good crop in 4 years	8-12 years
Pears	20 to 30 ft each way	4-5 yrs. Fair crop in 6-12 years	50-75 years
Persimmon	20 to 25 ft each way	1-3 years	25-40 years
Plum	16 to 20 ft each way	2-3 yrs. Good crop in 4-6 years	10-25 years
Raspberry	3x6 ft	1 yr. Good crop in 2-3 years	8-12 years
Strawberry	1x3 or 4 feet	1 yr. Heaviest crop usually in 2 years	2 years

NUMBER OF TREES AND PLANTS PER ACRE AT VARIOUS DISTANCES

40 feet apart	27 hills.	8 feet apart	680 hills.
35 " "	35 "	6 " "	1,210 "
30 " "	48 "	5 " "	1,732 "
25 " "	69 "	3½ " "	3,556 "
20 " "	108 "	3 " "	4,840 "
15 " "	193 "	2½ " "	6,969 "
12 " "	302 "	2 " "	10,890 "
10 " "	435 "	1 " "	43,560 "

FIELD CROPS PLANTING TABLE FOR NINETEEN HUNDRED AND SEVEN.

A digest of the experience of the best farmers of the United States as to methods of handling the various crops. The seeding season is given for localities within 100 miles north or south of the latitude of the Ohio river.

P=Potash, Ph=Phosphoric acid and N=Nitrogen

Crop	Seed per acre	Seeding Season	Seeding Methods	Soil Requirements	Tillage Requirements	Fertilizer Requirement	Common range of yields per acre
Alfalfa.....	15-25 lbs	May or Aug	Broadcast	Fertile loam	Clip weeds	P and Ph	3-8 tons hay
Artichokes.....	2-3 bu	May-June	Hills 3 ft wide	Well-drained loam	Surface plowing	Manure	275-1000 bu
Barley.....	6-10 pks	Apr-May	Broadcast	Fertile clay	After clover	Strong P	30-60 bu
Broom Corn.....	4-6 pks	May-June	6 in apart in row	Rich loam	Frequent, shallow	Manure	400-700 lbs brush
Buckwheat.....	2-3 pks	June-July	Drill, broadcast	Medium loam	Frequent, shallow	P and lime	15-40 bu
Beans (field).....	6-8 pks	June-July	4 in apart in row	Dry clay loam	Frequent, shallow	P and Ph	20-35 bu
Clover, red.....	10-16 lbs	Feb-May	Broadcast	Clay loam	After grain	Lime and P	1-3 tons hay, 1-4 bu seed
" alsike.....	12-20 lbs	Apr-May	Broadcast	Moist loam	With grasses	Lime and P	1-4 tons hay
" crimson.....	12-15 lbs	July-Sept	Broadcast	Clay loam	Fine seedbed	Lime and P	1-3 tons hay, 8-12 bu seed
Corn.....	1-4 pks	Apr-June	Rows or hills, $\frac{3}{4}$ ft wide	Fertile loam	Frequent, shallow	N, P and Ph	25-75 bu
Cotton.....	10-14 lbs	Apr-June	Rows 4 ft wide	Deep loam	Surface plowing	Ph and P and N	200-500 lbs
Cowpeas.....	$\frac{1}{2}$ -2 bu	May-Aug	Rows 30 in wide or broadcast	Loose loam	Light plowing	Ph and P	8-40 bu seed, 2-3 tons hay
Flax.....	2-8 pks	May-June	Rows 30 in wide or broadcast	Rich deep loam		N, no manure	8-15 bu seed
Grasses, orchard.....	2-3 bu	Apr or Oct	Broadcast	Rich clay loam		Manure	Pasture
" blue.....	10-15 lbs	Sept or Oct	Broadcast	Limestone clays		Manure	Pasture
Hemp.....	4-6 pks	Apr-July	Broadcast	Loose loam		Manure	500-1500 lbs fibre
Hops.....	2000 roots	Apr-May	Hills 7x7 ft	Rich loam	Light plowing	Manure	600-1200 lbs
Kafir corn.....	6-7 lbs	May-July	3 ft in rows	Rich loam	Frequent, shallow	Manure	30-50 bu
Millet.....	2-6 pks	May-July	Broadcast	Sandy loam		N, Ph or manure	20-25 bu
Oats.....	4-8 pks	Apr-June	Drill, broadcast	Rich loam	Shallow	P and Ph	30-60 bu
Peanuts.....	4-8 pks	May-June	Rows 3 ft wide	Sandy loam	Frequent, shallow	Rotted manure	60-100 bu
Potatoes.....	8-10 bu	May-Aug	Rows 3 ft wide or broadcast	Rich sandy loam		Manure	75-300 bu
Rape.....	2-3 lbs	July-Aug	rows 30 in wide	Rich loam			30 tons forage
Rice.....	1-3 bu	Mar-May	Drill, broadcast	Clay loam		N and Ph	25-40 bu
Rye.....	4-8 pks	Apr-Sept	Drill, broadcast	Dry loam		Manure	25-30 bu
Sorghum.....	1-2 bu	May-June	Seed broadcast	Rich loam	Shallow	Manure	3-15 tons
Soybeans.....	2-3 pks	May-June	Rows 25-30 in wide	Light loam	Shallow	Manure or N, Ph and P	12-20 bu
Sugar Beets.....	15-18 lbs	Apr-May	Rows 18 in apart	Sandy loam	Frequent, shallow	P and Ph or Manure	10-14 tons
Sugar Cane.....	4 tons canes	Sept-Mar	Rows 5-7 ft wide	Rich loam	Shallow plowing	N and Ph	20-30 tons
Tobacco.....	5000 plants	May-June	Rows 3 ft wide	Rich loam	Shallow plowing	N and P and Ph	700-1200 lbs
Vetch.....	4-6 pks	Aug-Sept	Broadcast	Sandy loam		P and Ph	2-3 tons hay
Wheat.....	5-8 pks	Oct-Nov	Broadcast	Rich loam		Ph and N and P	12-30 bu

GARDEN PLANTING TABLE FOR NINETEEN HUNDRED AND SEVEN

This table gives the best methods of planting each garden vegetable and the common ways in which each is prepared for eating, according to the experiences of leading farmers. The time of planting is designed for sections within 100 miles north or south of the latitude of the Ohio River. For localities further north or south make an allowance in the time of planting according to seasons.

Vegetable	When to Plant	How To Plant				Days to come up	Weeks before ready to eat	How prepared for eating
		2 in.	rows	24 in	wide			
Asparagus	April	3 "	"	24 "	"	20-30	3 (years)	Boiled
Beans, Bush, String	May-July	4-6 "	"	30 "	"	8	6 to 9 weeks	Boiled, baked
Beans, Bush, Lima	May	3 "	"	12 "	"	14	8 to 10	Boiled and seasoned
Beets	May-July	3 "	"	24 "	"	6	7 to 8	Boiled or baked, pickled
Brussels Sprouts	May-June	18 "	"	12 "	"	6	21	Boiled, pickled
Cabbage	March-June	24 "	"	24 "	"	6	14 to 18	Boiled, salad
Carrot	May	3 "	"	12 "	"	8-9	12 to 15	Soup, boiled
Cauliflower	March-June	24 "	"	24 "	"	8	20 to 25	Pickles, boiled, with cream
Celery	April-May	8 "	"	48-60	"	20-30	20 to 40	Raw, boiled, with cream
Corn, Sweet	May-July	6 "	"	30 or 36	"	8	10 to 20	Boil on cobs, stewed
Corn, Pop	May	6 "	"	30 or 36	"	8	30 to 40	Popped over fire
Cress	April-May	6 "	"	12 "	"	4	5 to 6	Relish, salad
Cucumber	May-June	4 in hill	"	60 in each way	"	4-11	8 to 10	Raw, pickled
Dandelion	April-August	8 "	rows 12 to 24	in wide	"	8	Next spring	Boiled, salad, greens
Egg Plant	February-May	24 "	"	36 "	"	11	15 to 20 weeks	Fried, baked
Endive	March-July	12 "	"	12 "	"	5	8 to 10	Salad
Kale	April-June	12 "	"	18 to 24	"	6	21 to 30	Boiled, mashed
Kohl Rabi	May-July	6 "	"	12 "	"	5	12 to 14	Raw, relish, salad, boiled
Lettuce	March-July	6 "	"	12 "	"	4-8	8 to 10	Used in soup
Leek	April-May	3 "	"	12 "	"	10	16 to 20	Raw
Melon, Musk	May-June	4 in hill	60 in apart	"	"	14	14 to 16	Raw
Melon, Water	May-July	4 in hill	60 " apart	"	"	14	15 to 20	Raw
Mustard	April-May	6 in., rows	12	in wide	"	4	3 to 5	Relish, salad, greens
Onions	April-May	3 "	"	12 "	"	10	15 to 25	Boiled, fried, baked
Okra	May	24 "	"	36 "	"	10-20	12 to 14	Used in soup
Parsley	March-April	12 "	"	12 "	"	14	3 to 12	Garnishing, soups and salads
Peas	February-May	12 "	"	12 "	"	20	20	Boiled, fried
Pepper	April-July	1-2 "	"	24 "	"	14-30	6 to 8	Stuffed, baked, pickled
Potatoes	April-June	12 "	"	30 "	"	20	10 to 20	Boiled
Pumpkin	May-June	2 "	hill	60 "	"	11	20	Boiled, baked, fried
Radish	April-August	1 "	rows	12	"	3 to 6	3 to 6	Pies
Salisfy	May-June	4 "	"	12 "	"	8	25	Relish, raw
Spinach	April-May	6 "	"	12 "	"	6	9 to 12	Soup
Squash, Summer	May-June	4 "	hill	60 "	"	11	6 to 8	Boiled
Tomatoes	February-May	36 "	rows	36 "	"	7	16 to 18	Raw, sliced, stewed
Turnip	April-July	4 "	"	12 "	"	4	8 to 12	Boiled, mashed

SPRAYING CALENDAR FOR NINETEEN HUNDRED AND SEVEN

Formulas for making insecticides and fungicides are printed on page 7.

PLANT	FIRST APPLICATION	SECOND APPLICATION	THIRD APPLICATION	FOURTH APPLICATION	FIFTH APPLICATION
APPLE (For scab, codling moth, bud moth, tent caterpillar, cunker worm, plum curculio.)	Spray before buds swell with copper sulphate.	Just before blossoms open, bordeaux and paris green.	When blossoms have fallen, bordeaux and paris green.	Eight to 10 days later, bordeaux and paris green.	Use ammoniacal copper carbonate in Sept. for scab if season is wet.
BEAN (Anthracnose, leaf blight.)	When third leaf expands, bordeaux.	10 days later, bordeaux.	14 days later, bordeaux.	14 days later, bordeaux.	Spraying with bordeaux after pods are half grown will injure them for market.
CABBAGE AND CAULIFLOWER (Worms, aphids.)	When worms first appear, kerosene emulsion or paris green.	Repeat the first application when necessary.	If plants are heading, use hellebore.	After heads form, use salt-peter for worms, tea-spoonful to 1 gallon water; emulsion for aphids.	
CHERRY (Rot, aphids, slug, plum curculio black knot.)	As buds break, bordeaux; when aphids appear, kerosene emulsion.	When fruit has set, bordeaux and arsenate of lead. If slugs appear, dust leaves with air-slaked lime or hellebore.	10-14 days if rot appears, bordeaux. Arsenate of lead for plum curculio.	10-14 days later, weak solution of copper sulphate, 3 oz to 50 gals water.	Repeat after every rain when fruit begins to color.
CURRENT (Worms, leaf blight.)	Bordeaux before leaves start. At first appearance of worms, paris green.	Repeat with paris green when necessary. Ammoniacal copper carbonate for blight.	Bordeaux for blight after fruit is picked.	Use whale-oil soap for the San Jose scale if necessary.	Cut canes close if pests are bad.
GRAPE (Fungous diseases, rose bug, etc.)	In spring when buds swell, bordeaux.	Just before flowers unfold, bordeaux and paris green.	When fruit has set, bordeaux and paris green.	2-4 weeks later, bordeaux.	Weak solution of copper sulphate.
NURSERY STOCK (Fungous diseases, San Jose scale.)	When first leaves appear, bordeaux and paris green or arsenate of lead.	Repeat at intervals of 10-14 days through the summer.	For scale, burn or fumigate with hydrocyanic acid gas.	Cut out leaf blight as fast as it appears.	Dig all trees that have crown galls.
PEACH, NECTARINE, APRICOT (Rot, mildew, scab.)	Before the buds swell, bordeaux.	Just before blossoms open, weak bordeaux (2-4-50) and arsenate of lead for curculio.	When fruit is set, weak bordeaux.	As fruit shows color, potassium sulphide, 1 lb to 50 gals water.	Repeat once or twice until fruit is ripe.
PEAR (Leaf blight, scab, psylla, codling moth, blister mite.)	As buds are swelling, bordeaux.	Just before blossoms open, bordeaux and paris green. Kerosene emulsion or whale-oil soap when leaves open for psylla.	After blossoms have fallen, bordeaux and paris green. If necessary, kerosene emulsion or soap.	8-12 days later, repeat third.	10-20 days later ammoniacal copper carbonate.
RASPBERRY, BLACKBERRY, DEWBERRY (Rust, anthracnose, leaf blight, saw fly.)	Before buds break, bordeaux.	Bordeaux and paris green just before the blossoms open.	(Orange or red. rust is treated best by destroying the plants attacked in its early stages.)	Spray after fruit is gathered with bordeaux.	10-20 days later, repeat.
STRAWBERRY (Rust, leaf blight, mildew.)	As soon as growth begins, bordeaux. Dip plant in bordeaux before setting.	When fruits are setting, bordeaux.	Spray new plantation bordeaux.	Repeat if weather is moist.	Dig the worst diseased plants.
TOMATO (Rot, blight, flea beetle.)	Soon after planting use bordeaux.	Repeat as soon as fruit is formed. Fruit can be wiped if disfigured by bordeaux.	Repeat first when necessary.	Keep the rotting fruit picked closely.	Clean up infected vines if remedies fail.
POTATO (Beetles, blight and rot.)	Spray with paris green and bordeaux when vines are small.	Repeat before insects become too numerous.	Repeat for blight and rot at intervals of 2 or 3 weeks during summer.	Spray with paris green for late bugs.	Dig early if rot is prevalent.

REMEDIES FOR SEED AND SOIL PESTS

Seed of Plant	For What Treated	Method of Treatment
Barley	Smuts	Soak seed enclosed in sacks 4 hours in cold water, let stand wet 4 hours more and dip 5 minutes in hot water at 130 degrees F., or three degrees lower than for other hot water treatments.
Cabbage and Cauliflower	Club root	Apply stone lime (quick-lime) before planting, at rate of 80 bushels per acre and work into soil with tools.
	Maggot	Make hole in soil near roots, pour in about a teaspoonful of bisulphid of carbon and fill hole with soil.
Cucumber	Nematodes	Heat earth before using in special box for 3 hours with 60 lbs. of steam or 4 hours with 40 lbs.
Oats	Loose smut	Immerse seed contained in open vessel for 10 minutes in hot water at 132-3 degrees F., for 7 minutes at 136 degrees F., or for 5 minutes at 140-2 degrees F., spread at once to dry. (2) Soak seed in $\frac{1}{4}$ per cent solution potassium sulphide for 24 hours with stirring, then dry. (3) Sprinkle a pile of seed to saturate with formalin of copper sulphate, one gal. to bu. After 2 to 3 hours, spread to dry. For latter, use lime in drying.
Onion	Smut	The soil once infected by spores of onion smut cannot easily be freed from them. Long planting in other crops or use of sets or transplants yields favorable results.
Potato	Scab	Soak seed for one hour in corrosive sublimate, or for 2 hours in formalin, then dry and plant on scab free soil.
Sweet Potato	Bin rot	Make dope 1 part flowers of sulphur and 6 parts earth:- Drop handful and set plant through it.
Tomato	Soil rot	(Same as above.)
	Nematodes	As for cucumbers above.
Turnip Wheat	Point rot	A supply of available water appears to be unfavorable to point rot of green tomatoes.
	Club root	As for cabbage and cauliflower. Avoid succession of mustard crops.
	Loose smut	Soak seed 4 hours in cold water, let stand 4 hours more in wet sacks, immerse 5 minutes in water at 133 degrees F. and dry.
	Stinking smut	Dip skinned seed for 10 minutes in hot water at 133 degrees F., and dry on disinfected surface, or immerse 10 min. in blue stone, dry with air slaked lime (by shoveling). Use two lbs. blue stone to 10 gals. water. Grain may be sprinkled with copper sulphate or formalin, as for oats.
	Insects in	Place one pound of bisulphid of carbon for each 2,000 lbs. of grain in grain in bins. Cover surface to hold the fumes which will spread through the mass, killing all insect life. Use in tight bins or buildings and do not use near fire of any description.

SPRAYING FORMULAS FOR INSECTICIDES AND FUNGICIDES.

Insecticides

PARIS GREEN—Paris green 1 lb to 100 to 200 gals water, to which add 1 lb slaked quick lime to prevent burning foliage. For tender foliage such as peaches, use the solution 1 lb to 300 gals of water. For use as a dust, mix 1 part paris green to 10 to 20 parts flour, ashes or road dust. Use London purple the same as paris green.

KEROSENE EMULSION—Dissolve 11-2 lbs hard soap in 1 gal boiling water and add 2 gals of kerosene or coal oil. Mix thoroughly with a pump for five to ten minutes and dilute from eight to ten times before using. For spraying young leaves use a mixture containing 15% kerosene.

CARBON BISULPHID—Keep this closely covered in tight vessel. Use only where living animals will not get the fumes which are very heavy and poisonous. Pour a small amount in bins and nests of insects and close the opening.

ARSENITES OF LIME AND SODA—Boil 1 lb white arsenic in 4 qts water until it is dissolved, slake in this solution 2 lbs quick lime adding water if necessary, and when slaked dilute to 2 gals. Use 1 qt to 40 gals water. Arsenic of soda is made by boiling

1 lb arsenic with 4 lbs of salsoda crystals in 2 gals of water until dissolved. Use 1 qt to 40 gals of water.

Fungicides

BORDEAUX MIXTURE—Dissolve 6 lbs copper sulphate (blue vitriol) in 25 gals of water. Slake 4 lbs fresh stone lime and dilute to 25 gals. Strain carefully. Mix just before spraying. For peaches, plums, and other tender foliage add 25 to 30 gals more water. Dissolve sulphate by hanging it in a cheesecloth bag in water.

COPPER SULPHATE SOLUTION—Dissolve 2 to 4 lbs of copper sulphate in 50 gals of water as recommended for making bordeaux mixture. Use as a spray before the foliage appears. When used on foliage dilute to about 1 lb to 200 to 300 gals of water.

AMMONIACAL COPPER CARBONATE—Mix copper carbonate 6 oz, ammonia 3 pts and water 50 gals together as follows: Make a paste of the copper carbonate with a little water, dilute the ammonia 7 or 8 times with water and add to the paste mixture, stirring until dissolved, add the rest of the water and then use only the clear blue liquid. It loses strength if allowed to stand and should not be mixed with insecticides.

HOW TO SELECT AND MIX FERTILIZERS

Advantages of Homemixing

There are some important advantages in mixing fertilizers on the farm. More careful attention can be given to the composition and a fertilizer can be mixed which will just suit the particular needs of a certain crop or soil. The resulting mixture is sure to be of high quality since the farmer knows just what is in it. The profits of the factories and the various middlemen and agents are saved as the manufacturer must make his fertilizer with the same materials which the farmer can buy, and they only can do it cheaper by being better prepared and buying their material on a large scale.

Material may be kept on hand for some time but the fertilizer should not be mixed until it is needed for use. Some combinations lose value if allowed to stand after they are mixed. No elaborate machinery is necessary. Have some good measures, such as a half bushel, a good pair of scales, a smooth, tight barn floor and some shovels. After pouring the required amount of each of the materials in a pile, shovel it over many times carefully to insure a good mixing. Be sure to protect it in damp weather to prevent any lumps forming. The formulas on page 9 are best adapted to general use on the farm and the table shows the number of pounds of each ingredient necessary to make up 2,000 pounds, or one ton of the mixture. In order to carefully prepare fertilizer you should carefully study the other tables given herewith regarding the needs of different crops and soils.

How Crops Show Fertilizer Needs

Lack of nitrogen is as a rule indicated by pale green foliage, small leaf and stem growth.

No lack of nitrogen is generally indicated by deep green foliage and vigorous growth. This should not be interpreted to mean that more nitrogen would not be worth while, but simply that the plant does not show its lack.

Excessive nitrogen generally causes very abundant foliaceous growth and retards or in part aborts flower and fruit development.

The lack of available phosphoric acid is as a rule betrayed by the slow maturing of the crop or its failure to form plump seed.

No lack of available phosphoric acid is generally indicated when a soil yields a full

grain crop, the seed of which matures early and is full round, plump and heavy.

Lack of potash is less readily indicated than that of either nitrogen or phosphoric acid.

No lack of potash seems likely when corn, potatoes or hay grow well and furnish a good crop and where fleshy fruits succeed.

Best Mixtures for Various Crops

Numbers refer to the formulas in table on page 9.

CORN. With manure; for silage, low to medium nitrogen, medium available phosphoric acid, medium to high potash (2); for husking or for the cannery, the same, except high available phosphoric acid. Without manure; for silage, high nitrogen, medium available phosphoric acid, medium to high potash (11); for husking or for the cannery, the same, except high available phosphoric acid.

POTATOES. With manure; medium nitrogen, low to medium available phosphoric acid, high potash (9). Without manure, the same, except high nitrogen (8).

OATS AND OTHER CEREALS. With manure; no nitrogen (possibly a very small amount of nitrate to start crop), high phosphoric acid, low to medium potash (12). Without manure; the same, except low to medium nitrogen. If grown for hay rather than for grain, medium rather than high phosphoric acid.

CLOVERS AND LEGUMES IN GENERAL. Low nitrogen, medium available phosphoric acid, high potash (23). If with manure, omit nitrogen. Ashes or lime in the fall are beneficial.

GRASS. Seeding down, with manure, medium nitrogen (from slow forms such as bone meal), low to medium phosphoric acid, low to medium potash (4). Without manure, high nitrogen. Top dressing, nitrate of soda in spring.

Best Materials for Various Purposes

Early growth, nitrate of soda, muriate of potash, acid phosphate. *Long growth*, nitrate of soda, blood, cottonseed meal, tankage. *Top dressing grass*, ground bone, acid phosphate, nitrate of soda. *Sandy soils*, nitrate of soda sparingly. *Clay soils*, light potash. *Sour soils*, wood ashes or lime. Do not mix materials containing nitrogen and lime or wood ashes together or the ammonia will be lost.

TABLES SHOWING FERTILIZER NEEDS OF SOILS

Composition of Commercial Fertilizer

Materials	Nitrogen			Potash
	Percent Available	Phosphoric Acid Total	per cent per cent	
Nitrate of soda	16	.....	.....	.....
Nitrate of potash	14	.....	.....	44
Sulphate of ammonia	20	.....	.....	.....
Dried blood, high grade	13	.....	.....	.....
Dried blood, low grade	10	.....	4	.....
Concentrated tankage	12	.....	1	.....
Bone tankage	5.5	.....	12	.....
Dried fish scrap	8	.....	7	.....
Cottonseed meal	7	.....	1.5	2
Acid phosphate	4	13	14	.....
Raw bone meal	.....	8	22	.....
Steamed bone	2	9	25	.....
Muriate of potash	.....	.....	50	.....
Sulphate of potash	.....	.....	50	.....
Kainit	.....	.....	12	.....
Hard wood ashes (un-leached)	.....	.....	1	5
Hard wood ashes (leached)	.....	.....	1	2

Manure Needed for Crops

Minimum amount of farmyard manure required to replace the ingredients abstracted from the soil by an acre of each crop.

Wheat	5 tons	Turnips	15 tons
Barley	5	Swedes	10
Oats	5	Mangolds	20
Meadow hay	8	Potatoes	10
Red clover	12	Cabbage	25
Beans	10	Carrots	10

Fertilizer in Roots of Crops

Kind of Plants	Nitrogen pounds	Phosphoric acid pounds	Potash pounds
Timothy and red top, average of 2 experiments	62	15	31
Clover, average of 3 experiments	36	10	22
One ton, rich stable manure	10	10	8

Elements Used by Various Crops

Kind of Crop	Yield per Acre	Nitrogen pounds	Phosphoric acid pounds	Potash pounds
Barley	40 bu	74	23	68
Buckwheat	30 bu	53	21	60
Oats	60 bu	60	22	50
Wheat	30 bu	62	20	26
Corn, ripened	60 bu	.....	.....	.....
Corn fodder, green	12 tons	84	32	34
Potatoes	300 bu	55	25	85
Turnips	700 bu	80	52	180
Beets	600 bu	110	40	190
Clover hay*	3 tons	123	27	132
Timothy and red top	3 tons	69	27	58
Mixed hay	3 tons	84	21	93
Beans*	40 bu	100	40	70

*Legumes that under favorable conditions derive a large part of their nitrogen from the air.

RECIPES FOR HOME MIXED FERTILIZERS

Composition of mixtures

No. formula	Crop for which each fertilizer is intended	Composition of mixtures					Analyses, per cent. or lbs. of each element in 100 lbs. of each formula.			
		Dissolved boneback, lbs.	Tankage, lbs.	Sulphate of ammonia, lbs.	Muriate of potash, lbs.	Ground bone, lbs.	Sulphate of potash, lbs.	Nitrate of soda, lbs.	S. C. phosphate rock, lbs.	Nitrogen
1	General use	334	666	208	292	—	—	—	—	4.
2	General use	1000	450	170	280	200	—	—	—	3.
3	General use	400	—	200	200	400	—	200	600	3.
4	General use	1050	750	—	100	—	100	—	—	3.
5	Potatoes	400	\$200	200	200	400	100	100	400	3.4
6	Potatoes	900	\$200	200	—	—	450	250	—	4.8
7	Potatoes	800	500	—	—	—	450	250	—	3.4
8	Potatoes	800	500	400	—	—	675	250	—	5.8
9	Potatoes	500	750	—	200	—	300	350	—	4.
10	Wheat, oats, rye, corn	600	\$100	50	150	—	—	100	—	2.
11	Corn	1000	500	300	250	700	—	—	—	3.
12	Oats	120	—	—	160	—	—	120	120	3.
13	Rye	280	\$320	—	100	—	—	—	280	2.
14	Barley	140	—	235	65	—	—	—	—	10.
15	Buckwheat	160	—	—	100	—	—	100	160	5.
16	Fruit trees	425	—	50	100	—	—	—	—	1.
17	Market gardening	700	—	—	400	700	—	200	—	1.
18	Tomatoes	320	—	—	160	—	—	160	—	3.
19	Melons	800	—	—	100	—	—	200	800	2.
20	Cabbage	448	—	—	—	112	—	224	—	4.
21	Beans	500	\$100	50	250	—	—	—	—	2.
22	Beets	100	—	100	100	—	—	100	100	7.
23	Clover	300	—	—	*400	—	—	100	—	1.8
24	Cotton	200	\$100	—	*300	—	—	—	200	1.
25	Tobacco	—	—	—	—	—	180	140	260	3.

* Kainit. † Cottonseed meal. ‡ Dried blood. § Ground fish. ¶ This was used at the south. The popular mixture in the Connecticut valley for raising prime cigar wrapper leaf tobacco is cottonseed meal 2000 pounds, high grade cotton hull ash 1000 pounds, oyster shell lime 500 pounds, land plaster or gypsum 500 pounds, on each acre. Various modifications of the formula are used.

Air-slaked lime, as has been observed in other experiments, has had a wonderfully beneficial effect in connection with certain plants, which has been attributed by us not only to its direct fertilizing action, but also largely to its having overcome the acidity of the soil or to its having effected the decomposition of constituents of the same which exerted an injurious influence upon the growth of certain plants.

HOW TO SELECT AND MIX FEEDS

How to Mix a Balanced Ration

The first essential of a balanced ration is palatability. That is, the combination of feeds must be such that the animal will have great desire to eat it and will be ready for each feed. Your observation of the appearance of the animal will do much toward determining this factor. In the second place, the feed must be adapted to the needs of the animal. For instance, a cow giving a large flow of milk needs milk producing feeds. The fattening pig needs feeds that will produce fat, and a breeding animal needs feeds that will maintain the body, produce bone and muscle, and nourish the young. The cost of feeds will also have a great deal to do with what feeds are used to make the balanced ration. The quantity of the feed that the animal can consume will also have a bearing since it would be impossible to have an animal eat enough of certain feeds to keep them in good health.

One of the best ways to prepare a ration is first to consider the feeds you have available at reasonable cost. Then combine these in such proportions as to give a good variety and a total amount of feed which the animal will readily consume. Then compare the ration fed with the standards on page 11 and calculate its value as a ration. If your feed is deficient in some element, add a little of some of the feeds to bring it up to the standard, at the same time keeping in mind that it must have all of the features above mentioned.

To Calculate a Ration

From the table on page 11 select the several feeds which you have available at reasonable cost; get the amounts of digestible nutrients as shown in the table, including dry matter, protein, carbohydrates and fats. These figures are the number of pounds per 100 pounds of the meal. By dividing by 100 you will get the number of pounds of nutrients in one pound of the feed. Then in each case multiply this by the number of pounds which you would reasonably expect to feed and you will have the amount of nutrients which your animal will get at each feed. It is best to calculate the ration on the basis of the amount of feed fed each day, paying no attention to the number of feeds.

You will need to select feeds that have enough bulk and roughness so that the animal can digest it readily without digestive troubles.

For instance, we decide to use 10 pounds of corn stover and 10 pounds of oat straw.

	CORN STOVER.		OAT STRAW.	
	In 100 lbs.	In 100 lbs.	In 100 lbs.	In 100 lbs.
Dry matter....	$59.5 \div 100 \times 10 = 5.95$		$90.8 \div 100 \times 10 = 9.08$	
Protein.....	$1.7 \div 100 \times 10 = 0.17$		$1.2 \div 100 \times 10 = .12$	
Carbohydrates	$32.4 \div 100 \times 10 = 3.24$		$38.6 \div 100 \times 10 = 3.86$	
Fats.....	$.7 \div 100 \times 10 = .07$		$.8 \div 100 \times 10 = .08$	

Totals

Dry matter 15.03 Protein .29 Carbohydrates 7.10 Fats .15

Standard

Dry matter 18. Protein .7 Carbohydrates 8. Fats .10

By comparing this ration with the standard we find that it is too low so we will need one pound each of oil meal and corn meal to keep up the protein. By combining the nutrients as before we now have a ration which is very near to the standard; in fact, near enough for all practical purposes.

Totals

Dry matter 16.8 Protein .66 Carbohydrates 8. Fats .26

Standard

Dry matter 18. Protein .7 Carbohydrates 8. Fats .10

Points to Keep in Mind

The quantity of food consumed by an animal is not always an indication that all is being used. Large amounts of feed are sometimes eaten by animals which have a stimulated appetite in an effort to satisfy it. A great deal of the feed taken passes through the body unchanged and the animal actually starves while eating much feed. A variety and change of feed is specially necessary where hay feeding is followed. This is particularly true of dairy cows and swine. In cattle and sheep the feed must have a certain amount of bulk or the animal will not flourish. For instance, a cow fed wholly upon fresh grains and mixed feed will not do well, but must have some coarse forage such as hay, corn fodder or silage, which makes rumination possible. It is a good general principle to feed all of the roughage that an animal can conveniently devour and enough grain and other feed to keep the ration up to the standard.

In calculating a ration it will seldom be possible to feed exactly the amount called for in a standard. Some animals will require more feed and others less. The individual animals must be studied in this connection. If an animal shows a peculiar need for feeds, satisfy this peculiar appetite so far as possible.

FOOD CONSTITUENTS

Composition of Common Feeding
Stuffs

Name of feed	Dry matter in 100 pounds	Digestive nutri- ents in 100 lbs.			
		Protein	Carbohydrates	Fats	
Concentrates	Lbs.	Lbs.	Lbs.	Lbs.	
Dent corn	89.4	7.8	66.7	4.3	
Flint Corn	88.7	8.0	66.2	4.3	
Sweet corn	91.2	8.8	63.7	7.0	
Corn cob	89.3	0.4	52.5	0.3	
Corn and cob meal	84.9	4.4	60.0	2.9	
Gluten meal	91.8	25.8	43.3	11.0	
Germ meal	87.6	9.0	61.2	6.2	
Starch refuse	91.8	11.4	58.4	6.5	
Hominy chops	88.9	7.5	55.2	6.8	
Starch feed wet	34.6	5.5	21.7	2.3	
Wheat	89.5	10.2	69.2	1.7	
High-grade flour	87.6	8.9	62.4	0.9	
Low-grade flour	87.6	8.2	62.7	0.9	
Wheat bran, spring wheat	88.5	12.9	40.1	3.4	
Wheat bran, winter wheat	87.7	12.3	37.1	2.6	
Wheat shorts	88.2	12.2	50.0	3.8	
Wheat middlings	87.9	12.8	53.0	3.4	
Wheat screenings	88.4	9.8	51.0	2.2	
Rye	88.4	9.9	67.6	1.1	
Rye bran	88.4	11.5	50.3	2.0	
Rye shorts	90.7	11.9	45.1	1.6	
Barley	89.1	8.7	65.6	1.6	
Malt sprouts	89.8	18.6	37.1	1.7	
Brewers' grains, wet	24.3	3.9	9.3	1.4	
Brewers' grains, dried	91.8	15.7	36.3	5.1	
Oats	89.0	9.2	47.3	4.2	
Oat meal	92.1	11.5	52.1	5.9	
Oat feed or shorts	92.3	12.5	46.9	2.8	
Oat hulls	90.6	1.3	40.1	0.6	
Rice	87.6	4.8	72.2	0.3	
Rice hulls	91.8	1.6	44.5	0.6	
Rice bran	90.3	5.3	45.1	7.3	
Rice polish	90.0	9.0	56.4	6.5	
Buckwheat	87.4	7.7	49.2	1.8	
Buckwheat hulls	86.8	2.1	27.9	0.6	
Buckwheat bran	89.5	7.4	30.4	1.9	
Buckwheat shorts	88.9	21.1	33.5	5.5	
Buckwheat middlings	87.3	22.0	33.4	5.4	
Sorghum seed	87.2	7.0	52.1	3.1	
Broom-corn seed	85.9	7.4	48.3	2.9	
Kafir corn	84.8	7.8	57.1	2.7	
Millet	86.0	8.9	45.0	3.2	
Flax seed	90.8	20.6	17.1	29.0	
Linseed meal, old process	90.8	29.3	32.7	7.0	
Linseed meal, new process	89.9	28.2	40.1	2.8	
Cottonseed	89.7	12.5	30.0	17.3	
Cottonseed meal	51.8	37.2	16.9	12.2	
Cottonseed hulls	88.9	0.3	33.1	1.7	
Sunflower seed	92.5	12.1	20.8	29.0	
Peanut meal	89.3	42.9	22.8	6.9	
Peas	89.5	16.8	51.8	0.7	
Soybeans	89.2	29.6	22.3	14.4	
Cowpeas	85.2	18.3	54.2	1.1	
Horse bean	85.7	22.4	49.3	1.2	
Fodder corn, green	20.7	1.0	11.6	0.4	
Fodder corn, field- cured	57.8	2.5	34.6	1.2	
Pasture grasses (mixed)	20.0	2.5	10.2	0.5	
Kentucky blue grass	34.9	3.0	19.8	0.8	
Timothy	38.4	1.2	19.1	0.6	
Orchard grass	27.0	1.5	11.4	0.5	
Redtop	34.7	2.1	21.2	0.6	
Sorghum	20.6	0.6	12.2	0.4	
Meadow fescue	30.1	1.5	16.8	0.4	
Hungarian grass	28.9	2.0	16.0	0.4	
Green barley	21.0	1.9	10.2	0.4	
Peas and oats	16.0	1.8	7.1	0.2	
Peas and barley	16.0	1.7	7.2	0.2	
Timothy hay	86.8	2.8	43.4	1.4	
Orchard grass hay	90.1	4.9	42.3	1.4	
Redtop hay	91.1	4.8	46.9	1.0	
Mixed hay	87.1	5.9	40.9	1.2	
Rowen (mixed)	83.4	7.9	40.1	1.5	
Soja-bean hay	88.7	10.8	38.7	1.5	
Oat hay	91.1	4.3	46.4	1.5	
Marsh or swamp hay	88.4	2.4	29.9	0.9	
Wheat straw	90.4	0.4	36.3	0.4	
Rye straw	92.9	0.6	40.6	0.4	
Oat straw	90.8	1.2	38.6	0.8	
Barley straw	85.8	0.7	41.2	0.6	
Red clover, green	29.2	2.9	14.8	0.7	
Alsike, green	25.2	2.7	13.1	0.6	
Crimson clover, green	19.1	2.4	9.1	0.5	
Alfalfa, green	28.2	3.9	12.7	0.5	
Cowpea, green	16.4	1.8	8.7	0.2	
Soja-bean, green	24.9	3.2	11.0	0.5	
Red clover, medium hay	84.7	6.8	35.8	1.7	
Mammoth clover hay	78.8	5.7	32.0	1.9	
Alsike clover hay	90.3	8.4	42.5	1.5	
White clover hay	90.3	11.5	42.2	1.5	
Crimson clover hay	90.4	10.5	34.9	1.2	
Alfalfa hay	91.6	11.0	39.6	1.2	
Cowpea hay	89.3	10.8	38.6	1.1	
Soja-bean straw	89.9	2.3	40.0	1.0	
Pea-vine straw	86.4	4.3	32.3	0.8	
Corn silage	20.9	0.9	11.3	0.7	
Clover silage	28.0	2.0	13.5	1.0	
Sorghum silage	23.9	0.6	14.9	0.2	
Alfalfa silage	27.5	3.0	8.5	1.9	
Cowpea vine silage	20.7	1.5	8.6	0.9	
Soja-bean silage	25.8	2.7	8.7	1.3	
Corn soja-bean silage	24.0	1.6	13.0	0.7	
Potato	21.1	0.9	16.3	0.1	
Beet, sugar	13.5	1.1	10.2	0.1	
Beet, mangold	9.1	1.1	5.4	0.1	
Ruta-baga	11.4	1.0	8.1	0.2	
Carrot	11.4	0.8	7.8	0.2	
Artichoke	20.0	2.0	16.8	0.2	
Cabbage	15.3	1.8	8.2	0.4	
Sugar-beet leaves	12.0	1.7	4.6	0.2	
Pumpkin, field	9.1	1.0	5.8	0.3	
Rape	14.0	1.5	8.1	0.2	
Dried blood	91.5	52.3	0	2.5	
Meat scrap	89.3	66.2	3	13.7	
Beet pulp	10.2	0.6	7.3	...	
Cow's milk	12.8	3.6	4.9	3.7	
Skim milk	9.6	3.1	4.7	0.8	
Buttermilk	9.9	3.9	4.0	1.1	
Whey	6.6	0.8	4.7	0.3	

Feeding Standards

Table showing the amount of dry matter and digestible nutrients required daily by farm animals per 1,000 pounds live weight.

	Dry matter Lbs.	Protein Lbs.	Carbohy- drates Lbs.	Fats Lbs.
Ox at complete rest in stall	18.0	0.7	8.0	0.1
Fattening cattle (first period)	30.0	2.5	15.0	0.5
Milch cow (yielding 22 pounds daily)	29.0	2.5	13.0	0.5
Horse (medium work)	24.0	2.0	11.0	0.6

GUIDE TO BREEDING FARM ANIMALS

Period of Gestation in Animals

The average duration of the period of gestation in domestic animals is as follows:

Ass	363 days	Sow	116 days
Mare	340 "	Dog	63 "
Cow	284 "	Cat	50 "
Sheep	152 "	Rabbit	30 "
Goat	149 "	Guinea Pig	21 "
Goose	30 "	Guinea Hen	26 "
Turkey	29 "	Hen	21 "
Duck	29 "	Pigeon	18 "

Common Range of Variation

Mare	.	.	295 days to 370 days.
Cow	.	.	265 " " 300 "
Ewe	.	.	145 " " 154 "
Sow	.	.	110 " " 118 "
Goose	.	.	27 " " 33 "
Turkey	.	.	26 " " 30 "
Duck	.	.	26 " " 32 "
Peahen	.	.	28 " " 30 "
Guinea Hen	.	.	25 " " 26 "
Pigeon	.	.	16 " " 20 "

Wolff's Animal Gestation Calendar

Date of Serving	Mares 340 Days	Cows 284 Days	Ewes 152 Days	Sows 116 Days	Date of Serving	Mares 340 Days	Cows 284 Days	Ewes 152 Days	Sows 116 Days
1 Jan.	6 Dec.	11 Oct.	1 June	26 April	5 July	9 June	14 April	3 Dec.	28 Oct.
6 "	11 "	16 "	6 "	1 May	10 "	14 "	19 "	8 "	3 Nov.
11 "	16 "	21 "	11 "	6 "	15 "	19 "	24 "	13 "	8 "
16 "	21 "	26 "	16 "	11 "	20 "	24 "	29 "	18 "	14 "
21 "	26 "	31 "	21 "	16 "	25 "	29 "	4 May	23 "	18 "
26 "	31 "	5 Nov.	26 "	21 "	30 "	4 July	9 "	28 "	22 "
31 "	5 Jan.	10 "	1 July	26 "	4 Aug.	9 "	14 "	2 Jan.	28 "
5 Feb.	10 "	15 "	6 "	31 "	9 "	14 "	19 "	3 Dec.	8 "
10 "	15 "	20 "	11 "	5 June	14 "	19 "	24 "	12 "	13 "
15 "	20 "	25 "	16 "	10 "	19 "	24 "	29 "	17 "	18 "
20 "	25 "	30 "	21 "	15 "	24 "	29 "	3 June	22 "	23 "
25 "	30 "	5 Dec.	26 "	20 "	29 "	3 Aug.	8 "	27 "	27 "
2 Mar.	4 Feb.	10 "	31 "	25 "	3 Sept.	8 "	13 "	1 Feb.	27 "
7 "	9 "	15 "	5 Aug.	30 "	8 "	13 "	18 "	6 "	1 Jan.
12 "	14 "	20 "	10 "	6 July	13 "	18 "	23 "	11 "	6 "
17 "	19 "	25 "	15 "	11 "	18 "	23 "	28 "	16 "	11 "
22 "	24 "	30 "	20 "	16 "	23 "	28 "	3 July	21 "	16 "
27 "	1 Mar.	4 Jan.	25 "	22 "	28 "	2 Sept.	8 "	23 "	21 "
1 April	6 "	9 "	30 "	26 "	3 Oct.	7 "	13 "	3 Mar.	26 "
6 "	11 "	14 "	4 Sept.	31 "	8 "	12 "	18 "	7 "	31 "
11 "	16 "	19 "	9 "	5 Aug.	13 "	17 "	23 "	13 "	5 Feb.
16 "	21 "	24 "	14 "	10 "	18 "	22 "	28 "	18 "	11 "
21 "	26 "	29 "	19 "	15 "	23 "	27 "	2 Aug.	23 "	16 "
26 "	31 "	3 Feb.	24 "	19 "	28 "	2 Oct.	7 "	28 "	21 "
1 May	5 Apr.	8 "	29 "	25 "	2 Nov.	7 "	12 "	2 Apr.	26 "
6 "	10 "	13 "	4 Oct.	30 "	7 "	12 "	17 "	7 "	2 Mar.
11 "	15 "	18 "	9 "	4 Sept.	12 "	17 "	22 "	12 "	7 "
16 "	20 "	23 "	14 "	9 "	17 "	22 "	27 "	17 "	12 "
21 "	25 "	28 "	19 "	14 "	22 "	27 "	1 Sept.	22 "	17 "
26 "	30 "	5 Mar.	24 "	19 "	27 "	1 Nov.	6 "	27 "	22 "
31 "	5 May	10 "	29 "	24 "	2 Dec.	6 "	11 "	2 May	28 "
5 June	10 "	15 "	3 Nov.	29 "	7 "	11 "	16 "	7 "	2 Apr.
10 "	15 "	20 "	8 Oct.	30 "	12 "	16 "	21 "	12 "	7 "
15 "	20 "	25 "	13 "	8 "	17 "	21 "	26 "	17 "	12 "
20 "	25 "	30 "	18 "	14 "	22 "	26 "	1 Oct.	22 "	17 "
25 "	30 "	4 April	23 "	18 "	27 "	1 Dec.	6 "	27 "	22 "
30 "	4 June	9 "	28 "	23 "	31 "	5 "	11 "	1 June	27 "

HELPS IN ESTIMATING BUILDING MATERIALS

About 1,000 shingles, laid 4 inches to the weather, will cover 100 square feet of surface, and 5 lbs of shingle nails will fasten them on. As 16-inch shingles are laid 5 inches to the weather, 1,000 shingles (4 bunches) will lay 125 square feet.

One-fifth more siding and flooring is needed than the number of square feet of surface to be covered, because of the lap in the siding and matching.

About 1,000 laths will cover 70 yards of surface, and 11 lbs of lath nails will nail them on. 8 bushels of goodlime, 16 bushels of sand, and 1 bushel of hair, will make

enough good mortar to plaster 100 square yards.

Five courses of brick will lay 1 foot in height on a chimney. 6 bricks in a course will make a flue of 4 inches wide and 12 inches long, and 8 bricks in a course will make a flue 8 inches wide and 16 inches long.

Cement, 1 bushel, and sand, 2 bushels, will cover 3 1-2 square yards 1 inch thick; 4 1-2 square yards, 3-4 inch thick; 6 3-4 square yards, 1-2 inch thick. 1 bushel cement and 1 of sand will cover 2 1-4 square yards, 1 inch thick; 3 square yards, 3-4 inch thick; and 4 1-2 square yards, 1-2 inch thick.

A GUIDE TO COMMON LIVE STOCK DISEASES

A Digest of Symptoms, Treatment and Means of Prevention

Cattle Diseases

TUBERCULOSIS—Symptoms not readily seen. The only reliable guide is the tuberculin test. Treatment consists of removal of infected animals, destroying those in the last stages and isolating the young until they have been found to be free from the disease. Calves from tuberculous cows should be removed immediately beyond reach of the disease.

ANTHRAX—Symptoms vary according as disease begins in the skin, lungs or intestines. An animal may suddenly fall and die in convulsions. Slight fever, heavy breathing, blue lining to the mouth and nose, are common symptoms. Medical treatment useless. Prevention effected through disinfecting of stables.

TEXAS FEVER is carried by the cattle tick and can only be prevented by extermination of the tick. A rise in temperature is the first symptom, which is followed by the loss of appetite and digestive derangement, breathing is rapid and medical treatment almost useless. Vaccination has been tried with varying success, mostly unfavorable. Ticks may be exterminated by a systematic change of pastures.

BLACKLEG shows in a loss of appetite, dullness, high fever and stiffness of legs. Death occurs in $1\frac{1}{2}$ days after first symptoms. Treatment with drugs of little value. Animals may be vaccinated with blackleg vaccine.

MILK FEVER symptoms appear in from one to three days after the cow calves; she is nervous, refuses feed, lies down and is unable to rise. Best treatment is the air pump method, by which the udder is pumped full of air, which is disinfected by passing through cotton.

Horse Diseases

COLIC is usually caused by improper feeding, over heating, and giving too much cold water while warm. The animal will appear uneasy, paw, roll and kick in the stall. Remedies must be given quickly. Blanket the animal and rub the abdomen briskly. Mustard plasters will help. Two or three tablespoonfuls of baking soda given at intervals of half an hour will sometimes give relief.

LUNG FEVER is indicated by chills, cold ears and legs, hard breathing and loss of appetite. Blanket the animal warmly, rub the legs and apply bandages. Give stimulants such as whiskey and ginger at short intervals. Give nourishing, easily digested food.

DISTEMPER is marked by an unthrifty appearance of the horse and frequent discharges at the nose. Treatment is of little benefit except to give proper shelter and nursing. Good mixed feed should be given, thin mash being preferable.

Sheep Diseases

FOOT ROT makes the feet tender and sore. Trim the feet, wash in 5% creolin solution. Treat until disease is checked.

SCAB symptoms are loss of wool, scabby condition of the skin. Treatment consists in the thorough, careful dipping of the entire flock and placing them upon clean pastures. Be sure to dip any new sheep brought in. A large number of excellent dips are on the market for this purpose, being better and easier to prepare than any that can be made at home.

TICKS are wingless flies and if once thoroughly removed from the flock can be easily prevented. Destroy by dipping the sheep the same as for scab. The dip used in this case might be 1-3 or 1-2 as strong as that used for scab.

Swine Diseases

HOG CHOLERA is shown in the loss of appetite, increased temperature, vomiting and a disposition of the hog to eat earth and other trash. Disease may be prevented by using precaution in bringing disease into the hog lots in other hogs, or by means of persons, dogs, chickens, etc. Medical treatment unsatisfactory. Infected animals should be isolated as soon as found.

SWINE PLAGUE symptoms are very similar to hog cholera. Coughing may show in this disease. Severe cases cause death in one day to one week. Medical treatment of little value. Disease should be prevented in the same way as with hog cholera and all infected animals isolated.

GUIDE TO MARKETING FARM CROPS

Successful marketing is as great an art as production of good crops. In the past it has often been true that an excellent crop was sacrificed because farmers did not give sufficient attention to questions of marketing. Extended experience is not always necessary to sell crops for their highest value. It only demands that a careful study of the market demands and fluctuations in prices with reference to the particular crop to be sold. A few general rules which have been outlined as a result of the experience of many successful farmers are as follows:

1. Always sell the product in its very best condition, other conditions being equal. If prices remain unchanged an article will bring more money when in its freshest and most attractive condition.

2. Always sell a product in its most attractive shape. In the case of fruits the neatness of the package and packing have a direct effect upon the cash return. In the case of live stock the care which has been used in grading them into lots of uniform size will do much to increase the net profit.

3. In shipping products avoid the unknown commission men. Millions of dollars have been stolen from farmers and truck growers of the country by dishonest and unscrupulous commission men. The money was not taken intentionally but through careless management and at time of sales the products which might have brought good prices would be allowed to go for less than would pay the shipping expenses.

4. Study the particular market at which you sell your products and learn the kind of an article that is wanted. The personal tastes of the buyers have much to do with the prices which he is willing to pay. Find what brand of live stock your buyer prefers, the weight, the condition and finish, etc, for which he is willing to pay the highest price. Then put your stock into this condition and please him if possible.

5. Keep yourself informed as to movements of prices and market demands through some good reliable market journal. Read crop reports closely and look forward to what the conditions will be when you are ready

to sell your crop. Study ranges of prices during previous years in the same market.

Standard Fruit Packages

In Canada and New York apples are shipped in barrels which generally hold about $2\frac{3}{4}$ bu. Many growers use second-hand flour barrels. The box is used mostly on the Pacific coast, but is finding some favor among fruit growers in the east. The box is of most value to growers selling to family trade. Standard apple barrels adopted by the International Apple Shippers' Association contain 100 qts, the heads the $17\frac{1}{8}$ inches in diameter, staves $28\frac{1}{2}$ inches long, bulge 6 inches. Bushel fruit box measurements are about $11\frac{1}{2} \times 11\frac{1}{2} \times 20$ in.

Shrinkage of Stored Grains

While shrinkage of weight in small grains is considered of but little importance and usually no note is taken of it in the largest grain markets, corn decreases in weight to a marked degree. The farmer who cribs his corn in Nov or Dec and holds it until the first of June can count on a loss of at least 15%, according to tests made at the Missouri experiment station; leaving out the cost of handling the loss by weight, 30c per bu for corn in the fall is better than 35c the following spring. In a Mich test corn harvested in Oct shrunk 30% by the following Feb, which is an extreme case. In another instance corn husked in autumn and sold in Jan only shrank 3%. In Ia, Ill and O results ranged from 4 to 20%. The shrinkage in corn after it is shelled showed about 7% loss during five months.

Dealing with Commission Men

Many farmers believe that it is possible to handle farm products without the aid of the middlemen or commission men. If this is practicable it should be done, but if you can make good profits by selling to the commission man and are sure he is trustworthy it is to your interest to do so. There are many honest men in this line of work and you can readily investigate their integrity by consulting your local banker. If possible, visit the commission merchant and become personally acquainted with him.

In making large shipments keep a close tab on things and understand it all clearly yourself, giving him free range in no particular.

Commission charges for selling products vary considerably at different markets. The following table shows the range at leading market points. These generally vary from 5 to 10% on perishable products and a flat charge on carload lots:

COMMISSIONS CHARGED FOR HANDLING

	New York	Boston	Philadel phia	Columbus	Cincinnati	Chicago	St. Louis	S. Fran'co
Butter	%	%	%	%	%	%	%	%
Eggs	5	5	5	10	5	5	5	5
Poultry	5	5	5	10	5	5	5	5
Hides	2@3	5	5	5	5	5	2@5	5
Apples	10 20c bbl.	5@10	8@10	8@10	10@15	5@10	5	8
Oranges	8@10	8	10	8@10	10	10	10	8
Sm. fruits	5@10	8	10	7@10	10	10	10	8
Dr. fruits	5@10	4@10	5	5@10	10	5	5	5
Potatoes	5@10	8	7@10	10	5c bu	5@10	5	5
Onions	10	8	7@10	10	10@15	5@10	5	5
Fresh veg	5@10	5@8	10	10	10	10	10	5
Veals	5	30c	10	—	5	5	10	2@3
Wool	1c lb	1c lb	5	1c lb	—	1c lb	5	2@

Produce placed in storage usually costs according to the length of time it is kept. On carload lots sold on track the expense is much lower, but produce is seldom sent in this way unless several farmers combine in shipping truck or a special crop is grown.

The expressage in various cities is an expense worthy of consideration. Such cost is added to fruit and express charge by the commission merchant and charged up against the shipment before he makes his return. This is the source of much improper dealing and should be carefully watched by shippers. The following rates are charged on garden and other products at the leading markets: Apples, 10c per month per barrel for short seasons, or 25 to 30c per barrel from October to May. Eggs cost 35 to 40c per case of 30 dozen for 6 months, or 10c per month for shorter periods. Candling eggs costs 10c per case in warm weather.

Markets and Market Influences

Prices governing many of the staple crops are regulated very largely one year with another by world-wide conditions. Cereal crops and cotton are especially susceptible to foreign influences, while the domestic markets for beef and pork, dairy products, wool, etc., are also always affected to an important extent.

Wheat affords a good example in the consideration of the world's movement of produce. Chief among the countries which grow more wheat than they can consume are the United States, Russia, Argentina, and in a lesser degree, India, Australia and Roumania. Northwestern Canada is the coming young giant in producing a surplus of breadstuffs and must eventually prove a sharp competitor of the United States.

In cotton, our great southern staple, the United States is far the greatest producer, making up a very large part of the spinning requirements of all Europe.

The United States fortunately secures a large share of the world's trade in provisions, there being a steady export demand for beef, pork and mutton. But there are other surplus countries—Argentina, Australia, New Zealand—and among the coming competitors Canada more than ever before. It will therefore be self-evident that the most successful farmer is the one who closely studies the world's crops, movements and markets in order to wisely judge when to sell his surplus above home requirements.

Free Alcohol Regulation

While it is quite likely that simple apparatus and methods of extracting alcohol from potatoes, sugar beets, etc., will doubtless be perfected later; such methods have not yet been announced by the Department of Agriculture at the time this book goes to press. Farmers in France and Germany have long made alcohol from such products on their own farms. Under the new law, removing taxes from denatured alcohol, farmers in this country should be able to make use of much of their waste products in this way.

This special denatured alcohol will be kept under strict surveillance and governmental supervision. For the completely denatured article, to every 100 gallons of ethyl alcohol will be added 10 gallons of wood alcohol and one-half gallon of benzine. The denaturing process will be accomplished in the distillery plants where the alcohol is produced, in special bonded warehouses.

The new law goes into effect January 1, 1907. Every farmer interested in this use of his by-products should write the Department of Agriculture for full particulars.

FARM RULES AND MEASUREMENTS

Government Land Measure

A township is 6 miles square and contains 36 sections, or 23,040 acres.

A section is one mile square and contains 640 acres.

A quarter-section is half a mile long, almost universally north and south, and one-fourth of a mile wide, and contains 80 acres.

A quarter-quarter section is one-fourth of a mile square and contains 40 acres. It is the smallest-sized tract, except fractions, sold by the government.

Rule for Measuring Land

To find the number of acres in a body of land, multiply the length by the width (in rods) and divide the product by 160. When the opposite sides are unequal, add them, and take half the sum for the average length or width.

Size of Tile Drains

For draining under average conditions, the drains being laid 4 feet or more deep, and laid on a well regulated fall of 3 inches in 100 feet:

For	2 acres	1 1/4 inch pipes
"	8 "	2 1/4 "
"	20 "	3 1/4 "
"	40 "	two 3 1/2 "
"	50 "	6 "
"	100 "	8 "

Capacity of Round Silos

Approximate capacity of cylindrical silos for well matured corn silage, in tons.

Depth Feet	Inside Diameter in Feet				
	16	18	20	22	24
20	66.95	84.74	104.6	126.6	150.6
21	71.56	90.77	111.8	135.3	161.0
22	76.53	96.84	119.6	144.7	172.2
23	81.61	103.3	127.5	154.3	183.6
24	86.61	109.6	135.3	163.7	194.9
25	89.64	116.1	143.3	173.4	206.4
26	97.23	123.0	151.9	183.8	218.8
27	102.6	129.8	160.3	194.0	230.8
28	108.1	136.8	168.9	204.3	243.2
29	113.7	143.9	177.6	214.9	255.8
30	119.4	151.1	186.6	225.8	268.7
31	124.9	158.2	195.2	236.3	281.8
32	135.9	165.7	204.6	247.5	294.6

Box Measurements and Capacities

Length	Dimensions in inches		Capacity
	Breadth	Depth	
24	24	14.7	1 bbl or 3 1/2 gal
15	14	11	10 gal
8 1/2	7	4	1 gal
4	4	3.6	1 qt
28	24	16	5 bu
16	12	11 1/2	1 bbl
12	11.2	8	1/2 bu
7	6.4	12	1 pk
8.4	8	4	1/2 pk
6	5 3/5	4	1/2 gal
4	4	2.1	1 pt

Capacities of Cisterns and Wells

For a circular cistern or well take the diameter in feet, multiply it by itself and again multiply by 7,854, which gives the area in feet; multiply this by 1,728 and divide by 231, and you will have the number of gallons, capacity for one foot in depth; from this calculate the depth. If for a square cistern, multiply length by breadth, and proceed to multiply the result by 1,728 and to divide by 231 as before. Calculated in this way, we find that each foot in depth of a circular cistern or well holds the following amounts:

5 feet in diameter	4.66 barrels
6 " " "	6.61 "
7 " " "	9.13 "
8 " " "	11.93 "
9 " " "	15.10 "
10 " " "	18.65 "

Square Cisterns or Wells

5 by 5 feet	5.92 barrels
6 " 6 "	8.54 "
7 " 7 "	11.73 "
8 " 8 "	15.19 "
9 " 9 "	19.39 "
10 " 10 "	23.74 "

Estimates of Materials

3 1/2 barrels of lime will do 100 square yards plastering, two coats.

2 barrels of lime will do 100 square yards plastering, one coat.

1 1/2 bushels of hair will do 100 square yards plastering.

1 1/4 yards good sand will do 100 square yards plastering.

1-3 barrel of plaster (stucco) will hard-finish 100 square yards plastering.

1 barrel of good lime will lay 1,000 brick.

2 barrels of lime will lay 1 cord rubble stone.

1/2 barrel of lime will lay 1 perch rubble stone (estimate 1/4 cord to perch).

A cord of stone, 3 bushels of lime, and a cubic yard of sand, will lay 100 cubic feet of wall.

To every barrel of lime estimate about 5/8 yards of good sand for plastering and brick work.

CENSUS FIGURES ON UNITED STATES FARMS

(Census of 1900)

Acreages of Farms

Total	Acreage	Improved	Not Improved	Ave. Size	Imp	U Imp
5,737,372	838,591,774	414,498,487	424,093,287	146.2	%49.4	%50.6

Value of Farm Property

Total	Land and Buildings	Implements	Livestock	Proportions		
				L B	Imp	L S
\$20,439,901,164	\$16,614,647,491	\$749,775,970	\$3,075,477,703	%81.3	%3.7	%15.0

Principal Incomes of Farms

Leading Product	Number	Proportion
Hay and grain	1,319,854	23.0
Vegetables	155,788	2.7
Fruits	82,060	1.4
Live stock	1,564,515	27.3
Dairy produce	357,544	6.2
Tobacco	106,250	1.9
Cotton	1,071,545	18.7
Rice	5,217	0.1
Sugar	7,174	0.1
Flowers and plants	6,159	0.1
Nursery products	2,029	(1)
Miscellaneous	1,059,319	18.5

Size of Farms

	Number	Proportion
Under 3	41,385	0.7
3 and under 10	225,844	3.9
10 and under 20	406,641	7.1
20 and under 50	1,257,496	21.9
50 and under 100	1,366,038	23.8
100 and under 175	1,422,262	24.8
175 and under 260	490,069	8.6
260 and under 500	377,951	6.6
500 and under 1000	102,526	1.8
1000 and over	47,160	0.8

Cash Crops, Not Fed to Livestock

	Number	Proportion	Amount	No of Farms	Proportion
			\$0		
Owners	3,148,648	54.9	\$1 and under \$50	53,353	0.9
Part owners	451,376	7.9	\$50 and under \$100	167,493	2.9
Owners and tenants	53,299	0.9	\$100 and under \$250	305,446	5.3
Managers	59,085	1.0	\$250 and under \$500	1,247,195	21.8
Cash tenants	751,665	13.1	\$500 and under \$1,000	1,602,375	27.9
Share tenants	1,273,299	22.2	\$1,000 and under \$2,500	1,378,539	24.0
			\$2,500 and over	829,142	14.5
				153,828	2.7

How Farms are Operated

	Number	Proportion
Owners	3,148,648	54.9
Part owners	451,376	7.9
Owners and tenants	53,299	0.9
Managers	59,085	1.0
Cash tenants	751,665	13.1
Share tenants	1,273,299	22.2

Crops of the United States for Seven Years

(In round thousands, last three figures omitted)

	1906	1905	1904	1903	1902	1901	1900
Corn, bu.....	*2,750,000	2,703,384	2,574,000	2,346,000	2,556,311	1,418,849	2,188,019
Wheat, bu.....	776,963	720,128	554,713	703,500	760,350	752,311	510,504
Oats, bu.....	930,827	1,003,376	973,135	823,138	1,028,220	700,869	832,254
Rye, bu.....	30,785	31,966	30,286	31,822	33,631	30,345	23,959
Barley, bu.....	148,263	143,915	144,451	139,145	134,954	109,933	81,816
Buckwheat, bu.....	150,000	14,585	15,008	14,200	14,530	15,126	9,567
Flaxseed, bu.....		30,445	22,190	26,639	29,351	29,079	23,412
Potatoes (w) bu.....	276,800	251,694	288,664	255,009	271,777	193,121	255,100
Apples, bbls.....	36,120	23,500	45,360	42,626	44,220	26,970	56,820
Onions, bu.....	3,670	3,305	3,341	3,090	3,822	3,050	3,738
Cranberries, bu.....	1,040	910	1,035	935	675	950	800
Hay, tons.....	38,897	58,330	58,164	57,806	61,000	50,981	52,006
Tobacco, cs (350 lb).....	†503	†445	†428	†469	†490	†346	†407
Broom corn, lb.....	47,740	41,700	40,812	31,203	39,750	37,150	39,506
Cotton, bls (495 lb).....	*12,500	10,500	13,500	10,000	10,720	9,996	10,401
Hops, bales.....	292	238	234	205	193	210	208
Cane sugar, tons.....		‡320	‡330	‡215	‡300	321	270
Beet sugar, tons.....	345	265	‡209	‡208	‡195	‡163	‡176

*Preliminary estimates. †Cigar leaf only. ‡Exclusive of Porto Rico and Hawaii. ¶Commercial estimates.

WHAT BECOMES OF THE SURPLUS OF UNITED STATES CROPS

American farmers have no cause for worriment over the disposition of the surplus corn crop. Enormous as it is, home requirements each season absorb by far the bulk of all the corn grown. The export trade is considerable and helpful to values, but is relatively less important to grain growers than a big foreign demand for breadstuffs. In an occasional year when our crop is large and price low, we export 200,000,000 bushels and upward, but this is only 8 or 10% of the crop. When prices are comparatively high, as during the past

two years, foreigners seem to be able to get along without very much American corn, and our exports fall off to small proportions.

The liberal surplus of wheat over home requirements permits large exports in the form of both wheat and flour to foreign countries. For some seasons past this business was poor, and some of the pessimists maintained that the United States had forever lost its prestige as a grower of wheat for foreign markets. But in 1905 it was larger and showed signs of returning precedence.

DOMESTIC ANIMALS OF THE UNITED STATES

Figures Corrected to January 1, 1906

STATE	HORSES		MULES		MILCH COWS		OTHER CATTLE		SWINE		SHEEP	
	Number	Farm value	Number	Farm value	Number	Farm value	Number	Farm value	Number	Farm value	Number	Farm value
Maine.....	137,512	\$12,888,312	—	—	191,016	\$5,634,972	157,581	\$2,636,326	69,877	\$611,434	270,025	\$1,084,826
New Hampshire.....	68,715	6,720,680	—	—	132,498	4,665,980	106,297	1,712,127	32,239	730,347	70,757	286,880
Vermont.....	81,803	8,680,672	—	—	291,021	8,065,078	3,150,882	3,150,882	73,358	730,922	220,578	900,078
Massachusetts.....	107,585	12,128,876	—	—	196,346	7,857,494	98,371	1,946,238	13,772	698,901	42,859	182,792
Rhode Island.....	13,399	1,394,031	—	—	25,721	1,052,854	10,340	1,574,682	13,772	138,988	33,305	183,234
Connecticut.....	59,162	6,575,528	—	—	134,789	4,973,862	98,427	1,574,682	47,417	499,428	99,335	165,456
New York.....	682,232	70,160,719	4,166	\$452,230	1,180,464	60,258,024	984,191	15,764,947	682,369	4,929,444	995,335	5,051,325
New Jersey.....	100,877	11,380,486	5,223	637,773	1,350,464	60,258,024	984,191	15,764,947	682,369	4,929,444	995,335	5,051,325
Pennsylvania.....	656,106	67,286,787	40,459	4,202,002	1,091,400	37,447,927	867,436	15,093,886	999,682	8,644,313	1,102,058	5,102,529
Delaware.....	36,142	156,614	—	—	148,987	4,452,020	131,319	3,397,711	46,031	340,629	11,384	48,626
Maryland.....	301,882	13,210,362	19,346	2,434,125	252,536	6,662,883	518,192	9,197,925	296,130	2,132,136	164,873	708,130
Virginia.....	180,433	17,193,863	46,344	4,434,125	259,266	7,026,109	437,210	4,802,748	1,593,219	3,634,819	497,341	1,556,145
North Carolina.....	82,204	9,504,063	108,713	16,630,500	131,945	3,804,440	216,339	2,445,708	684,307	3,590,498	60,034	153,488
South Carolina.....	137,918	14,542,106	223,157	30,408,227	299,479	8,011,063	673,179	6,913,546	1,438,830	7,841,624	273,893	588,868
Georgia.....	49,784	2,229,590	18,986	2,229,590	88,750	2,298,025	588,886	6,139,138	387,578	1,356,523	105,474	409,476
Alabama.....	235,143	14,535,227	185,889	20,750,794	253,132	5,163,893	496,762	4,131,822	1,137,501	5,289,380	185,887	223,588
Mississippi.....	219,632	18,331,654	263,882	27,673,394	326,405	8,372,288	644,993	4,418,532	1,196,558	5,025,544	132,926	383,480
Louisiana.....	129,546	59,016,773	508,349	35,633,590	864,196	22,658,606	8,579,739	101,026,428	2,600,799	3,143,139	1,544,168	4,160,784
Texas.....	318,621	27,984,464	200,069	20,867,174	316,432	4,973,623	481,075	4,834,804	649,307	12,093,715	347,990	891,706
Arkansas.....	175,791	14,510,375	10,877	988,138	198,417	7,167,185	488,619	5,362,596	1,024,842	3,476,229	344,950	891,706
Tennessee.....	399,306	33,453,835	194,738	18,540,552	869,764	9,754,088	692,535	10,560,803	1,410,907	6,631,263	538,305	2,146,491
Kentucky.....	885,918	90,550,455	18,099	1,794,145	889,657	28,441,283	372,136	7,267,814	2,620,212	17,424,410	2,991,162	13,400,406
West Virginia.....	669,729	66,219,486	3,501	346,260	778,069	24,525,184	1,014,875	23,903,064	3,078,820	10,143,325	1,970,886	8,834,272
Michigan.....	782,453	73,452,750	74,066	7,283,693	646,149	20,521,286	1,201,572	24,692,464	3,078,820	10,143,325	1,970,886	8,834,272
Indiana.....	1,429,473	138,601,686	137,476	13,915,374	1,043,200	24,525,184	1,976,163	40,408,316	4,683,900	32,553,105	719,465	3,681,504
Illinois.....	585,932	54,617,148	4,985	383,941	1,043,200	24,525,184	1,976,163	40,408,316	4,683,900	32,553,105	719,465	3,681,504
Wisconsin.....	723,141	61,517,592	8,405	671,829	1,439,340	42,655,799	1,010,985	15,997,577	1,702,915	12,260,988	930,848	1,465,206
Iowa.....	1,247,457	107,674,248	43,655	3,458,922	968,638	24,361,246	3,432,832	71,299,918	7,946,731	57,216,823	670,383	3,073,707
Minnesota.....	898,975	79,398,716	292,159	28,728,553	751,829	22,505,145	2,925,134	40,269,942	3,514,958	816,560	816,560	3,073,707
Missouri.....	1,056,752	79,265,955	113,339	9,729,553	836,668	22,505,145	2,925,134	40,269,942	3,514,958	816,560	816,560	3,073,707
Kansas.....	476,603	31,751,317	5,486	4,897,250	582,469	15,289,811	1,323,507	45,144,871	2,485,721	18,847,828	233,581	1,651,314
Nebraska.....	430,576	35,159,560	5,486	4,897,250	582,469	15,289,811	1,323,507	45,144,871	2,485,721	18,847,828	233,581	1,651,314
South Dakota.....	239,149	10,357,650	5,486	4,897,250	582,469	15,289,811	1,323,507	45,144,871	2,485,721	18,847,828	233,581	1,651,314
North Dakota.....	239,149	10,357,650	5,486	4,897,250	582,469	15,289,811	1,323,507	45,144,871	2,485,721	18,847,828	233,581	1,651,314
Montana.....	239,149	10,357,650	5,486	4,897,250	582,469	15,289,811	1,323,507	45,144,871	2,485,721	18,847,828	233,581	1,651,314
Wyoming.....	239,149	10,357,650	5,486	4,897,250	582,469	15,289,811	1,323,507	45,144,871	2,485,721	18,847,828	233,581	1,651,314
Colorado.....	239,149	10,357,650	5,486	4,897,250	582,469	15,289,811	1,323,507	45,144,871	2,485,721	18,847,828	233,581	1,651,314
New Mexico.....	239,149	10,357,650	5,486	4,897,250	582,469	15,289,811	1,323,507	45,144,871	2,485,721	18,847,828	233,581	1,651,314
Arizona.....	107,384	4,958,073	2,911	176,362	63,793	1,990,342	351,018	6,019,959	15,006	95,780	3,720,585	11,958,063
Utah.....	91,944	4,958,073	2,911	176,362	63,793	1,990,342	351,018	6,019,959	15,006	95,780	3,720,585	11,958,063
Nevada.....	149,551	16,713,380	2,911	176,362	63,793	1,990,342	351,018	6,019,959	15,006	95,780	3,720,585	11,958,063
Idaho.....	237,043	13,318,845	7,077	504,709	144,480	4,132,128	587,316	8,674,653	265,564	1,327,258	2,597,593	7,422,628
Washington.....	217,167	30,505,037	69,679	6,381,689	390,015	13,514,020	1,167,107	20,751,774	3,216,305	3,719,192	57,240	184,187
Oregon.....	399,673	27,354,020	87,373	7,445,047	182,332	4,202,454	1,387,151	20,751,774	3,216,305	3,719,192	57,240	184,187
California.....	411,772	11,139,348	53,648	4,202,454	182,332	4,202,454	1,387,151	20,751,774	3,216,305	3,719,192	57,240	184,187
Oklahoma.....	212,294	11,139,348	53,648	4,202,454	182,332	4,202,454	1,387,151	20,751,774	3,216,305	3,719,192	57,240	184,187
Indian Territory.....	—	—	—	—	109,360	2,646,512	470,063	6,602,452	731,352	3,719,192	28,419	84,972
United States.....	18,718,578	1,510,889,906	3,404,061	334,680,520	19,793,866	582,788,592	47,067,856	746,171,709	52,102,847	321,802,571	50,631,619	179,056,144

GRAIN AND HAY CROPS OF THE UNITED STATES

Figures Corrected to January 1, 1906

STATE	CORN		WHEAT		OATS		RYE		BARLEY		HAY	
	Acres	Production	Acres	Production	Acres	Production	Acres	Production	Acres	Production	Acres	Production
Maine.....	13,000	445,900	7,880	181,240	112,817	4,343,454	—	—	7,817	226,693	1,302,760	1,408,061
New Hampshire.....	27,045	1,000,655	—	—	12,174	389,307	—	—	1,522	31,655	619,330	718,655
Vermont.....	58,238	2,020,859	1,461	27,467	75,526	3,993,934	1,772	25,580	12,939	507,378	861,311	1,152,350
Massachusetts.....	44,789	1,679,962	—	—	6,372	203,904	3,938	61,039	—	—	571,061	767,459
Rhode Island.....	10,011	325,358	—	—	1,604	47,158	—	—	—	—	84,350	109,423
Connecticut.....	55,585	2,373,906	—	—	10,077	341,658	10,464	188,952	90,729	2,331,735	482,111	559,493
New York.....	613,103	19,312,744	490,521	10,300,941	1,298,210	49,600,782	125,474	2,165,084	—	—	4,711,641	6,132,933
New Jersey.....	277,749	9,943,414	110,075	2,835,230	62,456	2,000,124	135,774	2,658,984	—	—	420,322	474,964
Pennsylvania.....	1,441,797	56,065,963	1,623,273	1,689,811	1,136,526	39,160,324	346,565	5,886,503	8,692	217,300	3,072,021	4,608,032
Delaware.....	136,472	2,572,539	—	—	1,124	18,669	1,069	18,669	—	—	75,549	117,101
Maryland.....	43,141,974	800,619	13,196,790	33,160	33,160	29,741	300,744	1,436	44,916	286,011	371,814	371,814
Virginia.....	1,828,436	43,414,974	738,480	8,418,572	176,459	3,115,332	17,434	208,176	2,472	69,216	440,467	572,607
North Carolina.....	2,704,772	37,596,331	933,325	3,975,273	203,813	3,115,332	17,434	208,176	—	—	125,633	201,013
South Carolina.....	1,878,978	20,480,860	318,419	1,942,356	187,509	3,056,397	14,206	109,386	—	—	59,492	84,479
Georgia.....	4,235,924	47,250,184	305,288	2,106,556	233,250	3,322,075	—	—	—	—	12,999	19,239
Florida.....	645,416	6,518,702	—	—	29,987	359,484	—	—	—	—	55,245	104,966
Alabama.....	2,903,483	42,971,545	108,446	1,041,082	191,853	3,165,574	1,743	20,393	—	—	43,013	75,273
Mississippi.....	2,089,880	30,027,569	2,619	28,285	90,374	1,671,919	—	—	—	—	21,488	49,422
Louisiana.....	1,424,562	19,516,499	—	—	27,715	448,440	—	—	4,843	116,232	395,663	751,760
Texas.....	6,532,695	124,920,207	1,249,207	11,117,942	914,440	28,713,416	4,635	64,890	—	—	74,665	130,664
Arkansas.....	2,215,245	38,323,738	198,077	1,564,808	192,261	3,902,898	2,075	24,300	—	—	339,446	543,114
Tennessee.....	3,138,533	77,207,912	881,750	6,348,600	151,106	3,052,341	10,346	125,187	1,161	25,078	822,610	773,463
West Virginia.....	765,541	22,813,122	355,595	4,373,080	82,182	1,980,586	11,861	17,315	—	—	461,033	599,333
Kentucky.....	3,195,072	94,893,638	779,642	8,809,955	223,982	5,387,559	11,686	210,348	748	17,952	2,632,049	3,921,753
Ohio.....	2,973,529	112,399,396	1,882,907	32,197,710	1,061,280	37,993,109	134,100	2,155,000	—	—	606,323	804,314
Michigan.....	1,228,704	41,775,536	1,027,204	19,003,374	1,009,802	35,948,951	131,100	2,155,000	—	—	2,064,345	3,043,144
Indiana.....	1,473,614	187,130,623	1,931,774	35,351,464	1,343,709	47,432,822	71,471	1,286,478	—	—	1,716,132	2,539,875
Illinois.....	9,616,886	382,752,963	1,871,974	29,931,584	8,740,270	132,775,762	290,682	4,786,233	—	—	2,064,682	3,597,321
Wisconsin.....	1,507,614	65,497,849	474,233	7,833,351	2,227,682	98,679,368	81,472	1,399,830	—	—	1,786,994	3,221,959
Iowa.....	8,767,397	305,112,376	5,446,153	72,434,234	2,151,192	80,469,100	161,472	2,698,500	—	—	3,082,310	5,105,314
Missouri.....	6,014,639	204,294,798	3,683,954	13,683,068	1,746,169	131,113,458	79,481	270,956	—	—	3,092,321	5,105,314
Kansas.....	8,977,437	32,075,596	2,289,866	27,022,353	1,886,270	69,434,223	69,481	1,040,968	—	—	3,364,438	5,105,314
Nebraska.....	1,623,105	51,631,732	2,724,402	48,022,353	1,886,270	69,434,223	129,611	2,230,998	—	—	1,601,974	2,726,979
South Dakota.....	89,400	44,133,431	2,724,402	48,022,353	1,886,270	69,434,223	129,611	2,230,998	—	—	1,601,974	2,726,979
North Dakota.....	3,941	2,468,638	5,401,645	75,623,044	1,197,799	46,594,331	21,284	413,038	—	—	362,539	580,702
Montana.....	76,455	2,843,362	178,911	7,883,092	1,871	8,844	—	—	—	—	171,206	428,015
Wyoming.....	2,107	56,678	29,468	748,487	1,871	8,844	—	—	—	—	171,206	428,015
Colorado.....	115,659	2,776,484	254,355	6,358,875	137,929	4,827,515	2,368	44,982	—	—	665,226	1,762,849
New Mexico.....	39,423	997,402	42,691	947,740	11,912	351,044	—	—	604	12,884	79,067	213,595
Arizona.....	7,614	205,578	14,802	331,565	879	27,425	—	—	14,893	655,292	63,585	238,819
Utah.....	11,353	410,979	178,417	4,710,209	6,267	238,132	—	—	7,799	298,563	351,272	1,141,634
Nevada.....	5,506	149,763	26,800	723,600	6,267	238,132	—	—	6,893	234,022	382,467	1,185,643
Idaho.....	281,263	366,966	10,341,532	98,068	8,868,455	37,500	—	—	2,646,120	382,467	391,690	906,274
Washington.....	17,566	1,321,807	32,516,810	164,540	8,292,392	10,690	—	—	6,772,560	380,076	589,119	1,413,886
Oregon.....	56,562	1,810,944	717,565	13,352,585	281,842	6,792,392	—	—	1,855,722	380,076	589,119	1,413,886
California.....	1,902,948	48,144,584	1,886,238	17,542,013	168,755	4,725,140	—	—	1,237,333	28,606,960	305,070	436,250
Oklahoma.....	1,902,948	48,144,584	1,886,238	17,542,013	168,755	4,725,140	—	—	1,237,333	28,606,960	305,070	436,250
Indian Territory.....	1,902,948	48,144,584	1,886,238	17,542,013	168,755	4,725,140	—	—	1,237,333	28,606,960	305,070	436,250
United States.....	94,011,369	2,707,993,540	47,854,879	692,979,480	28,046,746	953,218,197	1,730,159	28,485,952	5,095,228	136,651,020	39,361,960	60,531,611

SPECIAL CROPS OF THE UNITED STATES

Potato Crop

State	Acres	Bushels	State	Acres	Bushels
Me....	103,317	13,040,475	Mich...	241,836	16,203,012
N. H....	19,723	2,366,760	Ind....	77,818	6,225,440
Vt....	26,566	2,603,468	Ill....	149,147	11,186,025
Mass...	29,443	2,855,971	Wis....	237,497	16,149,796
R. I....	6,490	811,250	Minn...	134,471	11,026,622
Conn...	31,931	2,937,652	Ia....	166,012	13,280,960
N. Y....	428,986	30,029,020	Mo....	86,089	7,059,298
N. J....	65,391	6,081,363	Kan....	68,564	5,553,684
Pa....	253,797	22,841,730	Neb...	87,144	8,104,392
Del....	7,677	713,961	S. D....	35,071	3,366,816
Md....	29,041	2,758,895	N. D....	25,425	2,415,375
Va....	55,105	4,628,820	Mont...	13,688	1,642,560
N. C....	25,883	1,992,991	Wyo...	4,002	680,340
S. C....	9,250	767,755	Col....	51,052	8,168,320
Ga....	8,627	560,750	N. Mex	1,470	110,250
Fla....	4,110	308,250	Utah...	12,358	1,631,256
Ala....	9,544	763,520	Nev....	2,806	336,720
Miss...	5,863	644,930	Ida....	11,782	1,649,480
La....	9,146	585,344	Wash...	34,199	4,856,258
Tex....	34,940	2,236,160	Ore....	40,488	4,453,680
Ark....	21,934	1,425,710	Cal....	50,291	8,298,015
Tenn...	23,600	1,888,000	Okla...	10,935	841,995
W. Va.	34,376	3,025,088	I. T....	12,497	949,772
Ky....	35,455	3,012,825			
O....	161,930	12,630,540	U. S.	2,996,757	260,741,294

Tobacco Crop

State	Acres	Pounds	State	Acres	Pounds
N. H....	125	212,500	La....	63	31,500
Vt....	191	315,150	Tex....	469	234,500
Mass...	4,488	8,302,800	Ark....	1,049	734,300
Conn...	13,340	23,011,500	Tenn...	41,502	31,873,536
N. Y....	6,151	7,061,348	W. Va.	4,005	3,163,950
Pa....	15,324	20,993,880	Ky....	275,874	228,975,420
Md....	30,143	19,592,950	Ohio...	59,229	50,344,659
Va....	118,447	79,951,725	Mich...		
N. C....	136,770	83,156,160	Ind....	6,244	5,113,836
S. C....	12,574	9,254,464	Ill....	1,132	1,018,800
Ga....	2,036	1,068,900	Wis....	39,294	53,832,780
Fla....	5,321	3,192,600	Mo....	1,665	1,295,370
Ala....	521	234,450			
Miss...	155	66,650	U. S.	776,112	633,033,719

Sugar Crop

State	Tons	State	Tons
CANE SUGAR		Mich.....	54,635
La....	330,000	Minn...	2,750
Tex....	12,000	Neb....	9,379
Porto Rico	210,000	N. Y....	4,235
Hawaii...	370,000	Ore....	4,026
BET SUGAR		Ore....	1,595
Cal....	64,251	Utah...	21,337
Col....	93,253	Wash...	2,321
Ida....	13,435	Wis....	11,950
Ill....	550	Total U. S.	283,717

Hop Crop

State	Pounds
New York.....	8,200,000
California.....	12,700,000
Oregon.....	20,500,000
Washington.....	9,800,000
Total U. S.....	51,200,000

Buckwheat Crop

State	Acres	Bushels	State	Acres	Bushels
Me....	23,013	690,390	W. Va	21,131	401,489
N. H....	1,932	44,436	Ohio...	8,170	138,890
Vt....	8,027	152,513	Mich...	33,352	533,312
Mass...	2,407	48,140	Ind....	5,018	85,306
Conn...	3,454	55,264	Ill....	4,208	67,328
N. Y....	331,497	6,298,443	Wis....	23,178	347,370
N. J....	11,835	248,535	Minn...	4,738	63,532
Pa....	232,398	4,647,960	Ia....	7,294	94,822
Del....	1,416	24,072	Mo....	1,853	29,648
Md....	8,124	154,356	Kan....	1,498	16,478
Va....	18,637	335,466	Neb...	870	12,180
N. C....	5,776	86,640			
Tenn...	532	8,512	U. S.	760,118	14,585,082

Flaxseed Crop

State	Acres	Bushels	State	Acres	Bushels
Wis....	29,847	388,011	N. D....	1,357,171	15,743,184
Minn...	449,008	5,073,790	Mont...	16,570	165,700
Ia....	74,879	853,621	Ida....	22,848	223,910
Mo....	40,789	318,154	Ore....	2,276	27,312
Kan....	110,555	884,440	I. T....	6,615	66,150
Neb...	18,433	188,017			
S. D....	405,845	4,545,464	U. S.	2,534,836	28,477,753

Cotton Crop

State	Acres	State	Acres
Va....	38,664	Tex....	6,945,501
N. C....	1,085,568	Ark....	1,718,751
S. C....	2,161,923	Tenn...	757,397
Ga....	3,738,703	Mo....	66,444
Fla....	256,173	Okla...	418,184
Ala....	3,500,168	I. T....	816,638
Miss...	3,051,265		
La....	1,561,774	Total.....	26,117,153

Rice Crop

State	Acres	Bushels	State	Acres	Bushels
N. C....	876	22,776	La....	240,037	6,192,955
S. C....	18,114	470,964	Tex....	214,490	6,649,190
Ga....	3,053	97,696	Ark....	460	22,356
Fla....	2,780	77,840			
Ala....	1,526	45,780	U. S.	482,479	13,606,989
Miss...	1,143	27,432			

Wool Product of the United States
(In round thousands.)

State	No. Sheep	Wool Pounds
Me....	190	1,140
N. H....	63	390
Vt....	160	960
Mass...	26	150
R. I....	6	35
Conn...	26	143
N. Y....	675	4,650
N. J....	32	176
Penn...	850	5,100
Del....	6	39
Md....	100	500
Va....	335	1,507
N. C....	205	871
S. C....	50	200
Ga....	250	950
Fla....	75	225
Ala....	200	700
Miss...	230	920
La....	155	573
Tex....	1,440	9,360
Ark....	200	800
Tenn...	260	1,105
W. Va.	475	2,375
Ky....	575	2,731
Ohio...	1,809	11,307
Mich...	1,300	8,450
Ind....	700	4,410
Ill....	525	4,675
Wis....	700	3,725
Minn...	350	2,450
Iowa...	500	3,250
Mo....	592	3,849
Kan....	170	1,275
Neb...	250	1,875
S. D....	575	3,737
N. D....	450	2,925
Mont...	5,200	37,700
Wyo....	4,500	31,500
Col....	1,400	9,100
N. M....	3,100	17,000
Ariz...	680	4,420
Utah...	2,000	13,000
Nev....	(5)	4.50
Ida....	2,200	16,100
Wash...	575	4,887
Ore....	1,900	15,200
Cal....	1,750	12,687
Okla...	60	360
Total U. S.....	38,261	253,448

RANGE OF PRICES OF STAPLE CROPS

Wheat Prices at Chicago

In cents per bushel for No. 2 Cash

Year	Jan.	May	July	Sept	Dec
1906	88@ 90	87@ 89	87@ 88	74@ 75	(—)
1905	116@121	87@111	87@105	79@ 86	85@ 88
1904	82@ 94	100@106	95@112	106@118	109@119
1903	70@ 79	70@ 84	75@ 64	74@ 93	80@ 83
1902	74@ 80	72@ 76	71@ 79	70@ 95	72@ 77
1901	71@ 76	70@ 75	68@ 71	68@ 71	73@ 79
1900	61@ 67	63@ 67	74@ 81	72@ 79	69@ 74
1899	66@ 76	68@ 79	68@ 75	69@ 75	64@ 69
1898	89@110	117@185	65@ 88	62@ 68	62@ 70
1897	71@ 94	68@ 98	68@ 80	85@101	88@109
1896	55@ 69	57@ 68	54@ 62	55@ 70	74@ 93
1895	48@ 55	60@ 85	61@ 75	55@ 65	34@ 60
1894	59@ 64	53@ 60	50@ 60	50@ 56	52@ 57
1893	72@ 78	68@ 76	54@ 66	62@ 70	59@ 65
1892	84@ 91	80@ 86	76@ 80	71@ 75	69@ 73
1891	87@ 96	99@108	84@ 95	90@100	89@ 94
1890	74@ 78	89@100	85@ 94	95@105	87@ 93
1889	92@102	77@ 87	76@ 85	75@ 83	76@ 80
1888	75@ 79	80@ 90	79@ 86	90@200	97@106
1887	77@ 80	89@ 89	67@ 71	67@ 72	75@ 80
1886	77@ 85	72@ 79	73@ 79	72@ 77	75@ 80
1885	76@ 82	86@ 91	85@ 91	76@ 87	83@ 89
1884	88@ 96	85@ 95	79@ 85	73@ 80	89@ 76
1883	93@104	107@114	96@103	92@100	94@ 99
1882	125@135	123@129	126@136	97@108	90@ 95
1881	95@100	101@113	108@122	120@141	124@130
1880	114@133	112@119	86@ 97	87@ 96	93@111
1879	81@ 87	90@103	88@105	85@106	122@134
1878	88@ 91	89@107	99@129	105@119	93@104
1873	119@126	122@134	114@146	89@121	105@117

According to records kept by the Chicago Trade Bulletin, wheat touched \$1.61 in August, 1872; \$2.47 in August 1869; \$2.85 in May, 1867, and sold at a range of 80 cents to \$1.15 in 1863.

Corn Prices at Chicago

In cents per bushel

Year	Jan.	May	July	Sept	Dec
1906	42@45	45@47	50 @52	50 @51	(—)
1905	42@43	48@64	53@59	51@54	47@49
1904	42@48	47@50	47 @50	51 @55	48@57
1903	44@48	44@46	49 @53	45 @53	42@44
1902	56@64	59@65	56 @88	57 @62	44@57
1901	36@38	43@58	43 @58	64 @60	62@67
1900	30@32	36@40	38 @45	39 @43	35@40
1899	40@46	46@55	41 @47	31 @36	24@27
1898	29@30	32@35	35 @47	44 @50	47@53
1895	34@40	44@49	45 @48	40 @45	36@43
1890	36@41	36@38	33 @38	39 @41	35@42
1875	64@70	60@76	67 @77	54 @62	45@54

Oats Prices at Chicago

In cents per bushel for No. 2 cash

Year	Jan.	May	July	Sept.	Dec.
1906	30-32	30-32	37-39	29-31	—
1905	29-31	29-32	27-35	25-30	30-31
1904	36-42	39-45	38-45	29-34	29-31
1903	31-34	33-38	33-45	35-38	33-35
1902	38-46	41-49	30-56	26-27	29-32
1901	23-24	28-31	27-39	33-36	42-48
1900	22-23	21-24	21-24	21-22	22-23
1899	26-28	24-28	20-25	21-23	22-23
1898	21-24	26-32	21-26	20-22	26-28
1897	16-17	17-19	17-18	19-21	21-24
1896	17-19	18-20	15-19	14-17	16-19
1895	27-29	25-31	22-25	18-21	16-18
1894	26-29	32-36	29-41	27-31	28-29
1893	30-32	29-32	22-30	23-29	27-29
1892	28-30	28-34	30-34	31-34	29-31
1891	41-44	45-54	27-45	26-30	31-34
1890	20-21	24-30	27-35	44-51	41-44
1889	24-25	21-24	22-23	19-20	20-21
1888	30-32	32-38	28-33	23-25	25-27
1887	25-27	25-28	24-27	23-27	28-31
1886	28-36	26-30	27-32	24-26	25-29
1885	25-29	31-56	24-32	24-27	27-29
1884	31-34	31-34	28-33	25-29	23-26
1883	35-40	38-43	27-37	24-25	30-36
1882	42-45	48-55	52-62	30-36	34-42
1881	30-32	36-40	37-45	36-46	43-48
1880	32-36	29-34	23-26	27-35	29-33
1879	19-20	24-31	25-37	21-27	33-37
1875	52-63	57-65	48-56	34-40	29-31
1873	24-26	30-34	27-30	26-31	34-41
1869	45-50	56-63	57-71	42-46	40-45

Hay Prices at Leading Markets

In dollars per ton for timothy

Year	New York			Chicago		
	Mar.	Aug.	Dec.	Mar.	Aug.	Dec.
1906	16.50	21.00	—	13.50	18.00	—
1905	17.00	16.50	16.50	13.00	13.50	12.50
1904	19.00	18.50	17.00	12.50	14.00	12.50
1903	21.00	25.00	19.00	14.00	15.00	13.00
1902	19.00	20.00	21.00	13.00	15.00	13.00
1901	19.50	19.00	19.00	14.00	15.00	13.00
1900	18.50	19.00	19.00	11.50	12.50	14.00
1899	13.50	19.00	17.50	10.00	13.00	11.50
1898	16.00	15.50	13.50	9.50	8.50	8.25
1897	16.00	16.00	16.00	10.00	11.00	10.00
1896	20.00	20.00	17.00	13.00	12.00	11.00
1895	16.00	22.00	18.00	11.00	15.00	14.00
1894	17.00	18.00	16.00	11.00	12.00	11.00
1893	18.00	19.00	18.00	12.00	11.00	11.00
1892	18.00	19.00	18.00	12.00	12.00	13.00
1891	13.00	16.00	17.00	10.00	12.00	15.00
1890	17.00	16.00	14.00	9.00	11.00	11.00
1889	18.00	18.00	17.00	10.00	11.00	11.00
1888	18.00	20.00	19.00	13.00	15.00	12.00
1887	16.00	17.00	18.00	10.00	15.00	15.00
1886	19.00	17.00	18.00	12.00	12.00	11.00
1885	20.00	23.00	19.00	13.00	15.00	12.00
1884	18.00	22.00	19.00	11.00	13.00	12.00
1883	17.00	18.00	18.00	12.00	13.00	11.00
1882	20.00	20.00	18.00	14.00	15.00	12.00
1881	24.00	20.00	22.00	16.00	14.00	17.00
1880	17.00	22.00	24.00	13.00	16.00	16.00

Cotton Prices at New York

In cents per pound for upland cotton

Year	Jan.	May	July	Sept.	Dec.
1906	12	11	11	10	—
1905	6	7	10	11	12
1904	13	13	10	11	8
1903	9	10	12	12	12
1902	8	9	9	9	8
1901	10	9	8	8	8
1900	7	9	10	9	10
1899	5	6	6	6	7
1898	5	6	6	6	5
1897	7	7	7	7	5
1896	9	8	7	8	7
1895	5	6	7	8	8
1894	8	7	7	6	5
1893	9	7	8	8	3
1892	7	7	7	7	10
1891	9	8	1	8	8

Potato Prices at Boston

In cents per bushel

Year	Imports	Farm	Nov.	Jan.	Apr.
1906	—	—	.55	\$0.70	\$0.70
1905	—	—	.55	.50	.40
1904	.58	.45	.55	.60	1.00
1903	.58	.61	.55	.70	1.05
1902	.66	.47	.78	.83	.85
1901	.41	.77	.80	.87	.95
1900	.61	.43	.65	.72	.70
1899	.95	.39	.51	.65	.58
1898	.56	.41	.43	.70	.90
1897	.40	.55	.75	.83	.90
1896	.53	.29	.39	.40	.43
1895	.73	.27	.38	.35	.35
1894	.45	.54	.38	.58	.70
1893	.42	.59	.68	.68	.80
1892	.47	.67	.80	1.00	1.10
1891	.95	.37	.50	.50	.45
1890	.51	.78	.85	1.05	1.15
1889	.40	.40	.60	.70	1.00
1885	.33	.53	.60	.85	.80

Apple Prices at New York

Price per bushel for winter varieties, wholesale

Season	Sept-June	Oct 15	Jan 1	Nov 1
1905-6	1.50@4.00	1.50@5.00	1.25@5.00	
1904-5	\$1.00@2.00	\$1.25@2.75	\$1.50@3.25	
1903-4	1.50@3.50	2.00@3.50	1.50@4.50	
1902-3	1.25@3.00	1.25@3.50	1.50@4.50	
1901-2	1.25@4.50	1.75@4.50	3.50@5.00	
1900-1	1.00@3.25	1.25@4.00	2.25@5.00	
1899-0	1.25@3.50	1.25@4.00	2.00@4.25	

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Patrons of Husbandry

The order of Patrons of Husbandry, commonly called the grange, was born at Washington, D. C., December, 4, 1867. The first subordinate grange meeting was held January 8, 1868, by Potomac grange, No. 1, at Washington. On February 19, 1868, Brother Broadman of New York was initiated in due form, being the first master.

How to Start a Grange

When a number of farmers living in the same community desire to start a grange, they first get together and sign an application to the state grange master for a charter. If it is granted, they—now the charter members—send an invitation requesting that he or one of his deputies come and complete the organization, as only one of these persons can organize a grange. After the organization is perfected, the officers are elected and installed by the deputy dispatched for the purpose, and each of the charter members introduced into the various mysteries of the society. The deputy who presides at the installation will instruct each in his or her duties. Thereafter all

persons wishing to become members of the grange must be balloted upon.

Officers of National Grange

Master—N. J. Bachelder, Concord, N. H.

Overseer—T. C. Atkeson, Morgantown, W.
 Va.

Lecturer—George W. F. Gaunt, Mulica
 Hill, N. J.

Steward—J. A. Newcomb, Golden, Colo.

Asst. Steward—F. E. Merchant, West Kings-
 ton, R. I.

Chaplin—W. K. Thompson, Liberty Hill,
 S. C.

Treasurer—Mrs. E. S. McDowell, 200 West
 Garden St., Rome, N. Y.

Secretary—C. M. Freeman, Tippecanoe
 City, Ohio.

Gatekeeper—A. C. Powers, Beloit, Wis.

Ceres—Mrs. George S. Ladd, Sturbridge,
 Mass.

Pomona—Mrs. George W. Baird, Edina
 Mills, Minn

Flora—Mrs. George B. Horton, Fruitridge,
 Mich.

Lady Ass't. Steward—Mrs. Johanna Walker,
 Marshallton, Del.

PARLOR AND PLATFORM RECITATIONS

The Old Brown Cow

A Tale of the Maine Coast.

Hark, do you hear that moaning off there in the fog and the m.ark.—
The whistling buoy, I s'pose you think, doing its lonesome work;
Well, it ain't just that, now, stranger,—of course you'll only laugh.
But the thing you hear is "The Old Brown Cow" calling her murdered calf.

Why do we call such a lonely ledge by such a peculiar name?—
Well, if you care to hear it, I'll tell you the way it came;—
On the charts they call it something else—I don't just get it now—
But we old islanders always call that ledge "The Old Brown Cow."

And this is the way that the thing came round:—some twenty years ago—
(It don't seem more than yesterday, the years do hurry so)
Old Sid Collarmore, one fine day, sailed somewhere off to the main,
And brought a cow and a fine young calf, when he sailed back again.

They said, I think, she was Her'ford, 'or some such a fancy breed,—
Old Collarmore said he bought her cheap—you could trust old Sid for greed—
But no mistake she was handsome, and kind as a kitten, too,
And the calf was simply a beauty, and goodness! how he grew!

We'd never had a cow before on our little island, sir,
And so we learned to love the beast, and we made a pet of her;
And the fishermen's children used to go and play with the calf all day,
And there wasn't a child in the blooming lot more full than that calf with play.

'Twas good for sore eyes to see them, and hear them in their glee,
And "Old Brownie" as we called her, was happy as cow could be;—
But, Old Sid, gosh! that man would sell his soul for a dollar bill,
And get the best of the bargain, too, why, man, he was mean as swill.

And so he figgered the matter out like this as fine as silk,
He 'lowed he'd kill and eat the calf, and then he could sell the milk;
And so he slaughtered that bossy, and that night when the cow came home,
She took on awful, and all that night you could hear that critter moan.

Just like that whistling buoy moans off there in the undertow,—
Listen, wind's arising fast, and the tide's begun to flow;—
We'll have a storm by the mornin'—and a corker, I'll bet my hat;—
There's always music along the shore when the "Old Cow" lows like that.

Well, you know, that cow went crazy—as mad as a mad March hare;
She'd smell of the hide on the picket fence, and stand and moan and stare;
And then she'd bolt like a porpoise up through the fields like mad,—
And fences! shiver my timbers! that cow had wings, she had.

Old Sid he started to catch her, but she caught Old Sid instead,
And she pitched him over the fish-flakes, Jiminy! how he bled!
Then she boited straight up the island, and stood on the bluff all day,
And talked with the whistling buoy there, on the ledges in the bay.

She thought 'twas her calf a-calling, and she answered him every moan,
And it simply made your heart ache to see her there alone;
But nobody dared go near her, since she used Old Sid that way,
And so we left her all to herself, as long as she cared to stay.

And there she stayed on the headland, and bellowed the whole night long,—
Only a cow?—I know it, but the whole blamed thing was wrong;—
Perhaps she hadn't a soul, like us, and she played a humbler part,
But when you murder her baby, sir, a cow has a mother's heart.

Well, sir, when the night fog lifted, the brown cow wasn't there,—
And we never saw her any more, tho' we looked for her everywhere;
Over the cliff, in the darkness, she must have taken a fall,
Trying to get as near as she could to her lost calf's mournful call.

* * * * *

That isn't the whole of the story, for one bleak November day
That very fall, in his little sloop, Old Collarmore sailed away,
Out through the reefs and the cloud-wrack,—the wind blew stiff, in squalls,
But Old Sid Collarmore didn't care, there were codfish on his trawls.

All day long we could see his boat a-beating about the bay;
All day long he was pulling trawls,—and, faith! 'twas a nasty day;
And the night fell, black as a coal pit, and thick with whirling snow,
And we saw the "Dolphin" beating in, far out in the afterglow.

But the vessel never reached the land, for the wind just screamed off shore,
And the foam-white rollers tumbled in with regular earthquake roar;
Feather white on the ledges, all froth on the fretting sand,—
We kept our beacons ablaze all night, but she never came to land.

In the low spring tides the gunners went, one day when the ledge was bare,
A-gunning, out to the "Old Brown Cow," and they found the "Dolphin" there;
Crushed, and mangled, and twisted, and everything washed away,
But the keel, and ballast, and anchor, and a strand of the chain bob-stay.

Then we knew the boat's misfortune, and we knew the old man's doom;
He had met his fate on the "Old Brown Cow," and the ocean was his tomb;
She had tossed him high on her cruel horns, she had scattered his wealth like chaff;
She had wrought her will, in her own rough way, on the man who killed her calf.

ENTERTAINMENT FOR WINTER EVENINGS

No, we never found his body, sir, for the sea is wide and deep,
And once it pulls you down below, it has got you there to keep;
And, for all we know to the contr'y, Old Sid is out there now,
In every smother to be tossed up on the horns of the "Old Brown Cow."

It ain't just pleasant to think about, a thing that was once a man,
With his bones all draped with seaweed out there by that whistling can,—
Especially when the island just shakes with the breaker's tread,—
But there he is, and there he'll stay, till the sea gives up its dead.

I guess that's the whole of the story,—only we fishermen now
Grow kinder thoughtful and silent, when we come sailing in by "The Cow,"—
And tho' some land-lubber jokes us, you never will hear a laugh,
When we hear, in the fog and the darkness, the "Old Cow" calling her calf.
[Julian S. Cutler.]

He Never Knewed

Old Billy B. was a pious man,
And heaven was his goal;
For, being a very saving man,
Of course he'd save his soul.
But even in this, he used to say,
"One can't too careful be,"
And he sang with a fervor unassumed,
"I'm glad salvation's free."

But the "means of grace," he had to own,
Required good, hard-earned gold:
And he took ten pews, as well became
The richest of the fold.
"He's a noble man!" the preacher cried,
"Our Christian Brother B."
And Billy smiled as he sub-let nine,
And got his own pew free!

In class meeting next old Billy told
How heaven had gracious been.
Yea, even back in the dark days when
He was a man of sin.
"T's bulldin' a barn on my river farm—
All I then had," he said;
"I'd run out o' boards, an' was feedin' hands
"On nothin' but corn bread.

"I tell ye, brethren, that I felt blue,
Short o' timber and cash,
And thought I'd died when the banks then bust,
And flooded all my mash.
But the Lord was merciful to me,
And sent right through the rift
The tide had made in the river banks
A lumber raft adrift.

"Plenty o' boards was there for the barn,
And on the top was a cheese,
And a bar'l o' pork as sound and sweet
As anyone ever sees.
Then I had bread and meat for the men,
And they worked with a will,
While I thanked God, who'd been good to me,
And I'm doing it still."

A shrill voiced sister cried, "Bless the Lord!"
The whole class cried "Amen!"
But a keen-eyed man looked at Billy B.
In thoughtful way, and then
Asked: "Brother B., did you ever hear
Who lost that raft and load?"
And Billy wiped his eyes and said:
"Brethren, I never knowed!" [Anonymous.]

The Star of Fortune

A popular form of entertainment during fall and winter evenings is fortune-telling, which always proves of fascinating interest to the young folk and the grown-ups as well, although the latter are sometimes loath to admit it. One of the cleverest systems of those who read the future by cards is called "The Star of Fortune." A description of this method of reading the future is as follows:

In the first place, shuffle the cards well, leaving out the one representing the consulting person. (Queen or king of hearts, diamonds, clubs or spades, depending on the complexion of the person.) Lay this face card in the center of the table.

After shuffling let the consulting person or sitter cut twice, separating the pack into three portions, cutting the cards toward him or her. Lay the first cut in front of the pack, and jump the next cut over it toward the one consulting.

Then the fortune teller should look at the bottom card of each cut, taking them up in regular order as they lie, face down.

As the cards run in this cut, good or bad, so will run the general luck of the sitter.

Then take up the pack and begin to deal, with the face card in the center of the table, discard each card from the pack in your hand until you come to a seven spot.

Lay the next card after the seven at the right of the face card.

Continue discarding and using the card next after a seven, laying the second card obtained directly under the face card, the third to the left, and the fourth above.

If two sevens come together, place the second seven next to the last card in the pack and continue.

Should three sevens appear in succession, shuffle and begin again on the round, counting it most lucky—seven being the mystic number.

After the four cards are laid shuffle the pack and go around again, this time laying the cards found after each seven at angles.

LOOKING INTO THE FUTURE

The third round, being careful to shuffle again, the cards are laid as in the first round. The fourth time at angles, as in the second round, the fifth as in the first, and the sixth as in the second.

Now 24 cards have been laid about the face card, forming the "Star of Fortune."

How to Read the Cards

Red cards: The ace of diamonds means a letter containing happy news, the two-spot of diamonds is the largest sum of money in the pack, representing a fortune running into millions. The three of diamonds means a small sum of money, the four a wealthy house. Five of diamonds means a money letter, and the nearest face card means the one from whom it comes. Six of this suit signifies money won by very hard work. Seven of diamonds always means general good fortune and a comfortable state of affairs. Eight is the only unlucky one of this suit, indicating loss of money, and if persistent in returning means downright poverty. The nine of diamonds is the card of the speculator, and always signifies a speculative disposition—if surrounded by cards of evil import, such as the two, nine or six of spades, the sitter should abandon speculation. The ten of diamonds signifies plenty of money.

The ace of hearts means love pure and simple. Two of hearts a ring or a kiss—three of hearts brings happiest thoughts. Four of this suit always means a proposal of marriage (to a single person)—and when followed by the two of hearts it foretells speedy wooing and wedlock. The five-spot of hearts indicates a gift; six, very high honors. The seven of hearts is a mystic symbol designating a religious temperament. It also means the leading of higher powers toward success. The eight of hearts predicts a loving, united family. Nine of this red suit is termed the luck card, par excellence, for it is the "wish card." If it faces you in the deal the wish will be speedily realized. Ten of hearts means hosts of friends, the powers to give great happiness, also signifying loyal friendships to the end.

Black cards: Spades, generally considered of evil import, are not always

so. The ace of spades is not, by itself, the harbinger of woe, for when it appears with the handle up, it is of good import, and accompanied by two red cards has pleasant meaning. Thus, it signifies marriage at the church, and a congenial, happy union.

If the nine or two of spades follows the ace, or lie near it, the ace is then the announcer of woe, even unto death, the relationship determined by the nearness of the cards to the face card of the inquirer.

The two of spades signifies falsehood, treachery and trouble from deceitful people.

The three of spades predicts a short journey, or tears, according to the neighboring cards. If the latter are red the little trip will be enjoyed, if dark, then come sorrow's tears.

Four of spades means a prison or a tomb. Sometimes it means widowhood—that is when hearts are near, and when followed by the four of hearts, indicates that mourning will soon be laid aside for a gown of second bridehood.

Five of spades foretells a shock—if red cards lie near it, brightness and good luck follow; if dark one, it means disaster.

Six of spades means illness in one's family, and if nine or ace follows, it is serious.

Seven of spades, the mystic number, signifies a tendency to mysticism and means spirituality.

Eight of spades is an uncanny card, that means trouble, woe and disaster. Nine signifies a broken heart. Alone it means bitter disappointment, but if near the ace or two-spot it indicates sorrow by death.

If the nine, two and ace range out at the left of the face card in the center the death of the sitter is near.

When red cards follow the black, it means that there is merely a danger that may be averted.

Clubs mean business. The ace is a business document, needing a signature—such as a will or deed. The ace of clubs also indicates a package by express if followed by a red card.

Two of clubs promises new clothing. The three of clubs means good tidings

LOOKING INTO THE FUTURE—Continued

from afar, and the advent of this card is followed by unexpected good news.

The four of clubs means a comfortable home. Five indicates a nice investment for or by you. The six of clubs is a most welcome card, and when it appears expect a fine business offer. Seven always indicates changes of various kinds and means that one must exercise great caution.

Eight of clubs signifies certain marriage based on business reasons. Nine is termed the "booze" card—meaning good fellowship, wine, woman and song; if next to the nine of hearts it also

means remarkable success, but if next to the eight of diamonds, loss of money.

Ten of clubs signifies many good, prosperous times near at hand; it also means a large crowd of people, but if next to the death card, mourners.

When four aces appear in the fortune it signifies luck extraordinary, long life and joy to the end. Four kings portend certain marriage, but if the person is already wedded there will be a second partner. Four queens indicate a love of sociability; also luck at games. When four jacks appear, hurtful gossip is abroad.

DISEASES COMMON TO INFANTS**Convulsions**

This is one of the most frequent of infantile troubles and is the most feared by mothers the world over. To know how to prevent and treat this condition you should know the cause, if possible. Remember, convulsions are the result of some disease or nerve irritation and not the disease itself.

If From Teething

Place the little patient in a hot bath up to its waist (not too hot), and apply a sponge wrung out in cold water to its head. Place a few drops of spirits of camphor on a handkerchief and let it inhale this for a minute or two. If the teeth are nearly through the gum, try to rub them all the way through with a clean silver thimble, afterward washing the mouth with a solution of baking soda, one teaspoonful to the glass of warm water. When the spasm is over a little camomile tea given every two hours for the next day will often quiet the nerves and prevent another spasm.

If From Indigestion

The baby may be fed too often, or its food may not be the proper quality. Here the treatment is the mustard foot bath (five teaspoonfuls powdered mustard to six gallons hot water), and the cold sponge to head. Get the child to vomit as soon as it is well over the spasm. Move the bowels by an injection of warm soap and water. To pre-

vent recurrence, give less food, feed less often, or make a change in the food the child is now taking.

If From Worms

These are usually the thread worms found in the lower bowel. Children having worms will be found, as a rule, lacking in general health. Build them up and there will be less likelihood of their being troubled in this way. The little patient will grit its teeth, pick the nose, be irritable, have pains in the abdomen, indigestion, and be restless at night, with spells of waking with a cry as though from a bad dream. To remove these little worm pests, have your druggist prepare the following: Calomel one grain, and santonin one grain. This is divided into *ten* powders and only *one* of these ten is given every hour for five hours. If at the end of this time the bowels do not move, give a good dose of liquid citrate of magnesia. Two days later repeat this with the remaining five powders. For children under one year, a more mild treatment is advisable. Place ten drops of the homeopathic tincture of cina in a glass and dilute with ten teaspoonfuls of boiled water. Give a teaspoonful of this mixture every hour, until all used. Repeat this every other day for two weeks.

If From Diarrhea

Should the baby have diarrhea or summer complaint, you must be careful

PREVENTION AND CURE OF INFANTILE TROUBLES

not to check the discharges too quickly, as this is liable to throw it into spasms. A common mistake is to give the little patient a dose of paregoric the first thing. Paregoric is only one of the many forms of opium, and opium in any form is a dangerous drug in the hands of any but an experienced physician, and particularly so with babies. A good dose of castor oil is by far the best thing to give as a starter, as this tends to clear the intestinal tract of any poisons. If the spasms are due to diarrhea or from checking it too quickly, the treatment is the same as outlined for indigestion, except that no vomiting is needed, and if the little one is exhausted from the discharges, you would use no cold sponge to the head.

Other Causes

There are many other causes of convulsions, such as congestion of the brain, caused by a blow or fall on the head, constipation, etc. The keynote of the treatment necessary is hot bath to remove the congestion, quiet, and remove the cause of the trouble if possible.

Constipation

This is often due to the poor quality of the mother milk, or too much starchy food. Many artificial foods contain large amounts of starchy and waste material, which serve to distend the bowels, causing partial paralysis of this part of the system. In other cases the liver is at fault, being in a torpid condition. If the child is being fed on milk or some artificial food you may add one to two ounces of cream to its food, or give it plain, immediately after nursing, if the mother's milk lacks fat. By continually giving suppositories and injections you are only making a bad matter worse. This injection habit, begun by the nurse in infancy, often results in a case of chronic constipation in adult life. If you are compelled to use an injection, a drachm of glycerin to one ounce of water, or a half ounce of sweet oil plain, is quite effective. You can usually cure this trouble by a change of food. And, last but not least, place the baby on its little commode at a set time each morning. Persist in this

and you will be rewarded by seeing the bowels move regularly at this time each day, without any assistance.

Prickly Heat

This is a very distressing condition, brought on by excessive amount of clothing and the hot weather. It should be guarded against by light clothing, frequent bathing, and the use of a good dusting powder, such as starch two parts to boracic acid one part. For this condition give frequent baths. The bran bath is excellent and is made by placing one quart of common bran in a cheesecloth bag. This bag is placed in five gallons of water at a temperature of 90 degrees F. Move the bag about in the water and squeeze it until the water becomes like a thin porridge. One of the best dusting powders is the following: Oxide of zinc 12 parts, bismuth 3 parts, and powdered camphor 1 part. This is simple and can be used freely. The diet should be light and fluid. If milk is used, it should be diluted.

Croup

This is due to a spasm of the muscles of the throat, usually dependent upon a catarrhal condition of the nose and throat, and usually comes on toward midnight. When the first symptoms show themselves, give a dose of from 25 to 50 drops of syrup of ipecac, according to the age of the patient, and repeat once in one hour. Keep the air of the room moist. At times a flaxseed poultice over the throat will give relief. The day following an attack give ten-drop doses of syrup of ipecac every two or three hours. During the day the child should have plenty of fresh air and cold sponges about the neck and chest. See that the child's general health is kept up by suitable tonics, etc.

Eczema Crusts on Scalp

This is most frequently due to faulty digestion. If the child is nursing, lengthen the time between feedings and do not let it stay at the breast as long as usual. Between feedings give a little lime water. See that the bowels are kept open and keep the kidneys free by giving plenty of fresh or boiled water.

A FEW SIMPLE HOME REMEDIES

It may be (if the baby is very fat) that the mother's milk is too rich in fats, and then you may substitute some artificial food part of the time. If the child is older and is taking solid food, stop those articles of diet that contain large amounts of starch, such as potatoes, oatmeal, etc. Then, again, overfeeding may throw the system out of gear, causing all sorts of trouble. For the removal of the crusts or scales themselves, give the scalp a good soaking in olive oil for 12 hours. At the end of that time wash the scalp thoroughly with warm water and soap. Then apply every two days a little coconut oil, rubbing it well into the scalp. But if you will look well to the diet you will usually escape this annoying condition.

Diarrhea

This is caused usually by some fault in the food, and if the mother will look carefully to the child's diet, she will escape many an attack of this trouble.

In treating this disease it is wise to put the child to bed at once and give it very little to eat for 24 hours, unless it be barley water or boiled milk with flour-ball grated in it. To make flour-ball, take enough flour to make a ball the size of the ordinary ball the boys play with, tie this up in a piece of cotton cloth and boil for four or five hours. At the end of that time take it out and scrape off the outside and you will find the inside as hard as a rock. Grate one teaspoonful of this into four ounces of boiled milk and give two or three teaspoonfuls of this every two hours.

Wash the bowels out thoroughly twice a day with one quart of hot water, to which is added one teaspoonful of baking soda. To do this, take your fountain douche, remove the hard rubber tip, and insert the tube well up into the bowels (about 12 inches), being careful not to use any force. Hold the douche bag about 3 feet above the child and let the water run in slowly. After a third to a half has run in remove the tube and let the child expel some of the fluid, if it will. Repeat this until the entire amount has been used.

If the abdomen seems bloated and full of gas, apply cloths wrung out in a quart of hot water to which is added one teaspoonful of turpentine. Change the cloths as soon as one gets cool. Keep this up for one hour. Give enough castor oil to move the bowels. Give plenty of boiled water to make up for what the system is losing by the discharges. If the baby is at the breast, you should lengthen time between feedings and let it nurse only half as long. Frequent bathing and fresh air are important factors in the recovery of these cases. Clarence Henry Hobson, M. D.

Simple Mutton Tallow Cosmetics

Where sheep are kept on the farm the wife and daughters have splendid material right at home to prepare reliable lotions and creams from reliable ingredients, all pure, which, if bought, would cost a good deal during the year. Mutton tallow is a well-known cure for many skin troubles, and it may be softened with a little sweet oil and odorized with a few drops of violet or rose to make it agreeable in use. A nice soap can be made by melting a small cake of pure toilet soap with an equal quantity of mutton tallow and half as much corn meal. Mix it well and let it cool slowly. Splendid for hands.

Here is an admirable cold cream recipe; better than some sold at high prices: Use the tallow taken from the sheep kidneys, try it out slowly on back of the stove or in the oven, then add a small quantity of powdered borax, also a few drops of camphor spirits; odorize with any favorite perfume, and pour into a shallow jar having cover. This is very soothing for summer tanning or sunburn, if a trifle of oil and borax are added to it to make it soft.

For Your Hands

It is not at all necessary to have coarse, red hands, just because you must do housework. Following is a good lotion to rub on the hands after washing dishes, and upon retiring at night: Mix and bottle $\frac{1}{2}$ pt good bay rum, 2 oz glycerin and the strained juice of 2 large lemons. This mixture will keep your hands soft and white.

LITTLE DOMESTIC ECONOMIES

To Color Carpet Rags

Blue

To make blue that will not fade, for one pound of rags, take one ounce Prussian blue, one-half ounce oxalic acid, pulverize them together, and dissolve in hot water sufficient to cover the goods. Stir the rags in this dye until they are the desired shade, then wring out and rinse in alum water.

Red

Carpet rags may be dyed a bright red as follows: Take two and one-half pounds of red wood chips, put them in a brass kettle, cover well with water and let them soak over night. Next morning add one-half pound powdered alum and boil till the strength of the chips is boiled out in the water. Strain out the chips and put the rags in the dye and simmer, airing occasionally, until bright enough to suit. This will color six or seven pounds of rags.

Brown

To color brown, for four pounds of rags, take one-half bushel butternut bark (use walnut and butternut bark, half and half, if you want a darker shade), cover with hot water and steep till the strength is out. Then put in the rags and steep an hour, take them out, and add one ounce copperas to the liquor, and bring it to a boil. Put in the rags again and simmer until dark enough. It is claimed that scaly moss from rocks and ledges will color a pretty brown that will not fade. Simply gather the moss, put it in a brass kettle or tin pan, cover with cold water, and let boil three or four hours. Skim out the moss, put in the goods and boil until you have the desired color.

Buff

To color nankeen, fill a good-sized brass kettle with small pieces of white birch bark and let steep 24 hours, but not boil. Then skim out the bark, wet the rags thoroughly in moderately strong soap suds, and put them into the dye. Stir and air them often, until dark enough, then wash in soap suds again. This is very pretty and inexpensive and does not fade.

Drab

To color a pretty drab, take one-fourth pound of cheap green tea, steep in one gallon water in a brass kettle, then add two tablespoons copperas, and skim thoroughly. Put in the goods, stir and air till properly dyed. If this should not be dark enough, add more tea. This will color five pounds of rags.

Green

Carpet rags can be dyed a "copperas" color by using this simple recipe: Dissolve three-fourths pound copperas in a bucketful of hot water. Also have ready a bucketful of lye made from wood ashes. First dip the rags in the lye, then dry in the sun and then dip them again in the copperas water. Let them drain and air well, then dip them in the lye again, etc, alternately dipping them into the lye and copperas water until you have the desired color. The process is more satisfactory if the rags are dried after each dipping.

Yellow

Half pound sugar of lead dissolved in hot water, one-fourth pound bichromate of potash dissolved in a vessel of wood in cold water. Dip goods first in lead solution, wring out and then dip in potash. Do this alternately until desired shade is obtained. To make the yellow a bright orange, slack quicklime drain off clear, add water enough so the goods will not be crowded, and keep at a scalding heat for about an hour.

NOTE—Copperas, Prussian blue and various other coloring matters are deadly poison. Have a care, therefore, that they are not left within the reach of children.

Travelers' Ink

Simply saturate some sheets of white blotting paper with aniline black, and paste several sheets together to form a thick pad. To use, tear off a corner, put in a little water. A square inch is enough to last a considerable writing. This is very convenient for travelers or campers, as water is generally plentiful, and the ink is quickly made. When you have finished writing the remaining ink may be poured on the blotting paper pad and allowed to soak in.

SIMPLE RULES FOR TABLE ETIQUETTE

About Table Manners

From the earliest times the importance of good table manners has been recognized. Even our dignified Washington deemed them of sufficient importance to write a treatise on the subject. "Make no show of taking great delight in your vituals," said he; "feed not with greediness; lean not on the table, neither find fault with what you eat."

While the minor details of table manners vary with the years on broader lines they still remain the same—consideration for others, the suppression of animal-like characteristics, such as gluttony and greediness, and the cultivation of those finer instincts that makes the breaking of bread together a beautiful family ordinance, not a wild scramble of pigs at a trough—and eating to live, not a living to eat.

Good manners should be ingrained, not superficial, and put on for company. To make them natural, training should be begun as soon as the child is able to sit at the table. If a little one is early taught by example and precept all those little details that mark a person of gentle breeding, he will always appear to advantage and that without self-consciousness.

"I always like to take a meal with a man before engaging him for my school," said a prominent educator. "No matter how brilliant a record he may have as a scholar, if his manners are boorish I do not care to have him."

Boorishness must not be confused with ignorance of "who's who and what's what," in the thousand and one table accessories, knives, forks, spoons, glasses and the like, that no one but the manufacturer can keep tabs on. A person may be gentle mannered and not be able to tell the difference between an olive fork and the butter pick; a bullion cup and a teacup, a sherbert glass and one for cocktail. He shows a distinct lacking in manners, however, when he stabs the bread with a fork, gobbles his food, masticates audibly and with opened mouth, smudges his glass in drinking, talks with his mouth full, shovels in his food with a knife, picks, punches and pokes the general dish of bread, cake or fruit to be sure he is getting the

best, or sniffs ostentatiously at each article of food as placed before him.

Table Dont's

A list of table don'ts that should be taught every child runs something like this:

Don't sit down to the table until the mother or older folks are seated. (This of course after the child leaves the high chair and bib period.)

Don't drum with the fingers, play with knife or fork, roll bread into pellets, put elbows on the table, fidget or monopolize the conversation.

Don't expect to be waited upon first. Elders first, then girls before the boys.

Don't drink without first wiping the mouth with a napkin, so as not to leave a smudge.

Don't criticise the food. If you don't like it, leave it.

Don't use the fingers as a pusher. Take a bit of bread.

Don't take soup from the point of the spoon, but from the side, dipping back in the plate, not forward.

Don't leave a teaspoon standing in the cup. When not in use lay it in the saucer.

Don't make a bridge of knife and fork. If not in use, lay side by side on right of plate.

Don't make a noise in eating. Don't chew with the mouth open, don't dispose of a whole glass of milk or water at one fell gulp.

Don't thrust the elbows out while cutting meat. Keep elbows at side and use the wrists. Don't plaster food on the back of a fork and then convey it to the mouth. Cut whatever is necessary, then use the fork. If the knife is not needed lay it on the side of the plate and convey the food to the mouth with the fork held in the right hand.

Don't leave the table without asking to be excused.

Silver Ink

Mix one ounce of the finest pewter or block tin in shavings with 2 oz of quicksilver, until all becomes fluid, then add to it sufficient gum arabic water to produce the proper consistency.

1907

JANUARY

Last Qtr
7thNew
14th

Weather Averages—Northerly winds with cold weather may be expected over the Rocky mountain, Great Plains and interior New England districts. Intervals of clear and warm weather will occur. Snows or rains in the Atlantic and New England states will be followed by cold weather. Storms will be frequent in the Texas and western Gulf region with generally heavy rains in the lower Missouri and Ohio valleys. The Pacific coast rainy season is at its height.

*The time of sunrise and sunset is given for the latitude of New York City.

I TUESDAY Temperature— *Sunrise 7.24 Sunset 4.43 Weather—	9 WEDNESDAY Temp.— S. R. 7.24 S. S. 4.50 W—
2 WEDNESDAY Temp.— S. R. 7.25 S. S. 4.43 W—	10 THURSDAY Temp.— S. R. 7.24 S. S. 4.51 W—
3 THURSDAY Temp.— S. R. 7.25 S. S. 4.44 W—	11 FRIDAY Temp.— S. R. 7.24 S. S. 4.52 W—
4 FRIDAY Temp.— S. R. 7.25 S. S. 4.45 W—	12 SATURDAY Temp.— S. R. 7.24 S. S. 4.53 W—
5 SATURDAY Temp.— S. R. 7.25 S. S. 4.46 W—	13 SUNDAY Temp.— S. R. 7.24 S. S. 4.54 W—
6 SUNDAY Temp.— S. R. 7.25 S. S. 4.47 W—	14 MONDAY Temp.— S. R. 7.23 S. S. 4.55 W—
7 MONDAY Temp.— S. R. 7.25 S. S. 4.48 W—	15 TUESDAY Temp.— S. R. 7.23 S. S. 4.56 W—
8 TUESDAY Temp.— S. R. 7.25 S. S. 4.49 W—	16 WEDNESDAY Temp.— S. R. 7.22 S. S. 4.57 W—

1st Qtr
21stFull
29th

JANUARY

1907

Timely Farm Work—This is the month in which to plan for the year. Work out a rotation system, the amounts and kinds of crops you will grow, and the live stock to which you will feed each crop. Send for catalogs of seedsmen advertised in Farm and Home and plan your garden for the coming year. Attend to stock carefully during these cold days. In the south spring work with crops will begin. Plowing will be in order.

17 THURSDAY Temp. — S. R. 7.22 S. S. 4.58 W —	25 FRIDAY Temp. — S. R. 7.17 S. S. 5.08 W —
18 FRIDAY Temp. — S. R. 7.21 S. S. 5.00 W —	26 SATURDAY Temp. — S. R. 7.17 S. S. 5.09 W —
19 SATURDAY Temp. — S. R. 7.21 S. S. 5.01 W —	27 SUNDAY Temp. — S. R. 7.16 S. S. 5.10 W —
20 SUNDAY Temp. — S. R. 7.20 S. S. 5.02 W —	28 MONDAY Temp. — S. R. 7.15 S. S. 5.11 W —
21 MONDAY Temp. — S. R. 7.20 S. S. 5.03 W —	29 TUESDAY Temp. — S. R. 7.14 S. S. 5.12 W —
22 TUESDAY Temp. — S. R. 7.19 S. S. 5.04 W —	30 WEDNESDAY Temp. — S. R. 7.13 S. S. 5.14 W —
23 WEDNESDAY Temp. — S. R. 7.19 S. S. 5.06 W —	31 THURSDAY Temp. — S. R. 7.12 S. S. 5.15 W —
24 THURSDAY Temp. — S. R. 7.18 S. S. 5.07 W —	Write the editor of Farm and Home what you think of this book. How could it be made better?

1907

FEBRUARY

Last Qtr
5thNew
12th

Weather Averages—The weather of this month is always very similar to January with generally northwestern winds all over the states east of the Rocky mountains, except on the Atlantic and Gulf coast. Severe storms are liable to occur in any of the central valleys. Look for a cold wave with heavy snows over the Great plains and Missouri valley. Rainy season still continues on Pacific coast, but it will be dry in the Rocky mountain district.

*The time of sunrise and sunset is given for the latitude of New York City.

I FRIDAY Temperature— *Sunrise 7.11 Sunset 5.16 Weather—	9 SATURDAY Temp.— S. R. 7.03 S. S. 5.26 W—
2 SATURDAY Temp.— S. R. 7.10 S. S. 5.18 W—	10 SUNDAY Temp.— S. R. 7.02 S. S. 5.28 W—
3 SUNDAY Temp.— S. R. 7.10 S. S. 5.19 W—	11 MONDAY Temp.— S. R. 7.01 S. S. 5.29 W—
4 MONDAY Temp.— S. R. 7.09 S. S. 5.20 W—	12 TUESDAY Temp.— S. R. 7.00 S. S. 5.30 W—
5 TUESDAY Temp.— S. R. 7.08 S. S. 5.21 W—	13 WEDNESDAY Temp.— S. R. 6.58 S. S. 5.31 W—
6 WEDNESDAY Temp.— S. R. 7.07 S. S. 5.23 W—	14 THURSDAY Temp.— S. R. 6.57 S. S. 5.32 W—
7 THURSDAY Temp.— S. R. 7.06 S. S. 5.24 W—	15 FRIDAY Temp.— S. R. 6.56 S. S. 5.33 W—
8 FRIDAY Temp.— S. R. 7.04 S. S. 5.25 W—	16 SATURDAY Temp.— S. R. 6.54 S. S. 5.35 W—

1st Qtr
19thFull
28th

FEBRUARY

1907

Timely Farm Work—Prepare hotbeds and coldframes and complete plans for next year's planting. Dispose of the surplus of apples, roots, etc. Start the incubator and fix up the poultry house. Provide a good variety of feeds for stock. In the south, planting will be in full swing. As soon as weather is settled plant melons, cucumbers, tomatoes and all the more tender vegetables.

17 SUNDAY Temp. — S. R. 6.53 S. S. 5.36 Weather —	25 MONDAY Temp. — S. R. 6.42 S. S. 5.46 W —
18 MONDAY Temp. — S. R. 6.52 S. S. 5.37 W —	26 TUESDAY Temp. — S. R. 6.40 S. S. 5.47 W —
19 TUESDAY Temp. — S. R. 6.51 S. S. 5.38 W —	27 WEDNESDAY Temp. — S. R. 6.39 S. S. 5.48 W —
20 WEDNESDAY Temp. — S. R. 6.49 S. S. 5.40 W —	28 THURSDAY Temp. — S. R. 6.38 S. S. 5.49 W —
21 THURSDAY Temp. — S. R. 6.48 S. S. 5.41 W —	We guarantee the reliability of every advertiser in Farm and Home. Always say in writing them, "I saw your adv. in Farm and Home."
22 FRIDAY Temp. — S. R. 6.46 S. S. 5.42 W —	You can do your friends no greater favor than bringing to their notice the helpfulness of Farm and Home. Incidentally in this way, you may secure a valuable premium.
23 SATURDAY Temp. — S. R. 6.45 S. S. 5.43 W —	If you have not yet renewed your subscription to Farm and Home for the coming year, better do so at once, so as not to miss a single copy.
24 SUNDAY Temp. — S. R. 6.43 S. S. 5.45 W —	Have you received a copy of our new premium list? If not, better send for one today. There are lots of good things listed therein which are easily secured.

1907

MARCH

Last Qtr
7thNew
14th

Weather Averages—Cold waves followed by warmer periods may be expected in the northern states from Montana eastward. Short but severe wind storms accompanied by snow are likely to occur in nearly all sections of the country east of the Rocky mountains. The precipitation during March averages somewhat greater than February, most of it usually being in the form of rain. Heavy storms are likely to occur over the Great lakes and New England.

* The time of sunrise and sunset is given for the latitude of New York City.

I FRIDAY Temperature— Sunrise 6.36 Sunset 5.50 Weather—	9 SATURDAY Temp.— S. R. 6.24 S. S. 5.59 W—
2 SATURDAY Temp.— S. R. 6.35 S. S. 5.51 W—	10 SUNDAY Temp.— S. R. 6.22 S. S. 6.00 W—
3 SUNDAY Temp.— S. R. 6.33 S. S. 5.52 W—	11 MONDAY Temp.— S. R. 6.21 S. S. 6.01 W—
4 MONDAY Temp.— S. R. 6.31 S. S. 5.53 W—	12 TUESDAY Temp.— S. R. 6.19 S. S. 6.02 W—
5 TUESDAY Temp.— S. R. 6.30 S. S. 5.54 W—	13 WEDNESDAY Temp.— S. R. 6.17 S. S. 6.03 W—
6 WEDNESDAY Temp.— S. R. 6.28 S. S. 5.55 W—	14 THURSDAY Temp.— S. R. 6.15 S. S. 6.04 W—
7 THURSDAY Temp.— S. R. 6.27 S. S. 5.57 W—	15 FRIDAY Temp.— S. R. 6.14 S. S. 6.05 W—
8 FRIDAY Temp.— S. R. 6.25 S. S. 5.58 W—	16 SATURDAY Temp.— S. R. 6.12 S. S. 6.06 W—

1st Qtr
21thFull
29th

MARCH

1907

Timely Farm Work—This is the month to get a good start on the crop season. Buy seeds and plants and order supplies of all sorts. Get out the stable manure. Give the poultry careful attention, start incubators. Look carefully after the sheep as the first lambs appear. Sow any early crops as the ground will permit. In the south cultivation will begin. Stock peas and corn may be planted in favorable localities.

17 SUNDAY Temp.— S. R. 6.11 S. S. 6.07 Weather—	25 MONDAY Temp.— S. R. 5.58 S. S. 6.16 W—
18 MONDAY Temp.— S. R. 6.09 S. S. 6.08 W—	26 TUESDAY Temp.— S. R. 5.56 S. S. 6.17 W—
19 TUESDAY Temp.— S. R. 6.08 S. S. 6.10 W—	27 WEDNESDAY Temp.— S. R. 5.54 S. S. 6.18 W—
20 WEDNESDAY Temp.— S. R. 6.06 S. S. 6.11 W—	28 THURSDAY Temp.— S. R. 5.52 S. S. 6.19 W—
21 THURSDAY Temp.— S. R. 6.04 S. S. 6.12 W—	29 FRIDAY Temp.— S. R. 5.51 S. S. 6.20 W—
22 FRIDAY Temp.— S. R. 6.02 S. S. 6.13 W—	30 SATURDAY Temp.— S. R. 5.49 S. S. 6.21 W—
23 SATURDAY Temp.— S. R. 6.01 S. S. 6.14 W—	31 SUNDAY Temp.— S. R. 5.48 S. S. 6.22 W—
24 SUNDAY Temp.— S. R. 5.59 S. S. 6.15 W—	Invest in a three-year subscription to Farm and Home. It's big value for that money.

1907

APRIL

Last Qtr
5thNew
12th

Weather Averages—The weather this month will be controlled by occasional north winds which will bring intervals of cold weather. Local thunderstorms and wind storms may be expected in the Central states. Sudden changes of temperature are likely. The rainy season ends on the Pacific coast. Rainfall over the Great plains and upper Missouri valley is somewhat greater than for March. Occasional snows will occur over the Atlantic and New England states.

* The time of sunrise and sunset is given for the latitude of New York City.

I MONDAY Temperature— *Sunrise 5.46 Sunset 6.23 Weather—	9 TUESDAY Temp.— S. R. 5.33 S. S. 6.32 W—
2 TUESDAY Temp.— S. R. 5.44 S. S. 6.24 W—	10 WEDNESDAY Temp.— S. R. 5.31 S. S. 6.33 W—
3 WEDNESDAY Temp.— S. R. 5.43 S. S. 6.25 W—	11 THURSDAY Temp.— S. R. 5.29 S. S. 6.34 W—
4 THURSDAY Temp.— S. R. 5.41 S. S. 6.26 W—	12 FRIDAY Temp.— S. R. 5.28 S. S. 6.35 W—
5 FRIDAY Temp.— S. R. 5.39 S. S. 6.27 W—	13 SATURDAY Temp.— S. R. 5.26 S. S. 6.36 W—
6 SATURDAY Temp.— S. R. 5.38 S. S. 6.28 W—	14 SUNDAY Temp.— S. R. 5.25 S. S. 6.37 W—
7 SUNDAY Temp.— S. R. 5.36 S. S. 6.29 W—	15 MONDAY Temp.— S. R. 5.23 S. S. 6.38 W—
8 MONDAY Temp.— S. R. 5.35 S. S. 6.31 W—	16 TUESDAY Temp.— S. R. 5.22 S. S. 6.39 W—

1st Qtr
20thFull
8th

APRIL

1907

Timely Farm Work—Now is the time to make every stroke count. Careful planning will be needed. This is the great planting month and hardy vegetables, potatoes, plants, roots and forage crops must go into the soil. Early corn may be put in in favorable localities. In the south, planting will be completed. Cultivation will occupy the main attention. Strawberries and early vegetables will begin to ripen and must be picked.

17 WEDNESDAY Temp.— S. R. 5.20 S. S. 6.40 W—	25 THURSDAY Temp.— S. R. 5.08 S. S. 6.48 W—
18 THURSDAY Temp.— S. R. 5.19 S. S. 6.41 W—	26 FRIDAY Temp.— S. R. 5.07 S. S. 6.49 W—
19 FRIDAY Temp.— S. R. 5.17 S. S. 6.42 W—	27 SATURDAY Temp.— S. R. 5.05 S. S. 6.50 W—
20 SATURDAY Temp.— S. R. 5.16 S. S. 6.43 W—	28 SUNDAY Temp.— S. R. 5.04 S. S. 6.51 W—
21 SUNDAY Temp.— S. R. 5.14 S. S. 6.44 W—	29 MONDAY Temp.— S. R. 5.03 S. S. 6.52 W—
22 MONDAY Temp.— S. R. 5.13 S. S. 6.45 W—	30 TUESDAY Temp.— S. R. 5.02 S. S. 6.53 W—
23 TUESDAY Temp.— S. R. 5.11 S. S. 6.46 W—	Try a little subscription work for Farm and Home. You can secure some fine premiums.
24 WEDNESDAY Temp.— S. R. 5.10 S. S. 6.47 W—	It is important that you renew your subscription before expiration, so as not to miss a single copy of Farm and Home.

1907

MAY

Last Qtr
4thNew
12th

Weather Averages—Dry, pleasant weather will prevail on the Pacific coast with more bright days throughout the Rocky mountain region. Frost practically disappears in the northern states, extended storms occurring less frequently. Occasional thunder storms and local rains may be looked for in the Great central plains. Dry periods are likely to occur in any of the central and eastern states. Snowfall will be very light except in high altitudes.

*The time of sunrise and sunset is given for the latitude of New York City.

I WEDNESDAY Temperature— *Sunrise 5.00 Sunset 6.54 Weather—	9 THURSDAY Temp.— S. R. 4.50 S. S. 7.03 W—
2 THURSDAY Temp.— S. R. 4.59 S. S. 6.55 W—	10 FRIDAY Temp.— S. R. 4.49 S. S. 7.04 W—
3 FRIDAY Temp.— S. R. 4.58 S. S. 6.57 W—	11 SATURDAY Temp.— S. R. 4.48 S. S. 7.05 W—
4 SATURDAY Temp.— S. R. 4.57 S. S. 6.58 W—	12 SUNDAY Temp.— S. R. 4.47 S. S. 7.06 W—
5 SUNDAY Temp.— S. R. 4.55 S. S. 6.59 W—	13 MONDAY Temp.— S. R. 4.46 S. S. 7.07 W—
6 MONDAY Temp.— S. R. 4.54 S. S. 7.00 W—	14 TUESDAY Temp.— S. R. 4.45 S. S. 7.08 W—
7 TUESDAY Temp.— S. R. 4.53 S. S. 7.01 W—	15 WEDNESDAY Temp.— S. R. 4.44 S. S. 7.09 W—
8 WEDNESDAY Temp.— S. R. 4.52 S. S. 7.02 W—	16 THURSDAY Temp.— S. R. 4.43 S. S. 7.10 W—

1st Qtr
20thFull
27th

MAY

1907

Timely Farm Work—This is the month for tillage and the completion of the planting. The most of the corn crop will be planted this month and early surface tillage followed. Put in a succession of vegetables. Prepare for swarming in the apiary. Use the rainy days to put the barn in order for harvest. In the south, the early truck harvest is on and tobacco planting occupies attention. Cotton should be thoroughly cultivated to keep down weeds.

17

FRIDAY

Temp. — S. R. 4.42 S. S. 7.11 W. —

18

SATURDAY

Temp. — S. R. 4.41 S. S. 7.12 W. —

19

SUNDAY

Temp. — S. R. 4.40 S. S. 7.13 W. —

20

MONDAY

Temp. — S. R. 4.40 S. S. 7.13 W. —

21

TUESDAY

Temp. — S. R. 4.39 S. S. 7.14 W. —

22

WEDNESDAY

Temp. — S. R. 4.38 S. S. 7.15 W. —

23

THURSDAY

Temp. — S. R. 4.37 S. S. 7.16 W. —

24

FRIDAY

Temp. — S. R. 4.36 S. S. 7.17 W. —

25

SATURDAY

Temp. — S. R. 4.35 S. S. 7.18 W. —

26

SUNDAY

Temp. — S. R. 4.35 S. S. 7.19 W. —

27

MONDAY

Temp. — S. R. 4.34 S. S. 7.20 W. —

28

TUESDAY

Temp. — S. R. 4.34 S. S. 7.21 W. —

29

WEDNESDAY

Temp. — S. R. 4.33 S. S. 7.21 W. —

30

THURSDAY

Temp. — S. R. 4.33 S. S. 7.22 W. —

31

FRIDAY

Temp. — S. R. 4.32 S. S. 7.23 W. —

Make the most of what Farm and Home offers.
Write the Editor your opinion of how he could
make it better.

1907

JUNE

Last Qtr
3rdNew
10th

Weather Averages—Rains will occur mostly in the form of local thunder storms, general storms being few. Intense heat for short periods is likely to occur in any of the north central states. More favorable weather in New England and on the Atlantic coast may be expected. Occasional drouths are likely to occur in the Missouri valley, though the rainfall may not be well distributed. The dry season begins on the Pacific coast.

*The time of sunrise and sunset is given for the latitude of New York City.

I SATURDAY Temperature— *Sunrise 4.32 Sunset 7.24 Weather—	9 SUNDAY Temp.— S. R. 4.29 S. S. 7.29 W—
2 SUNDAY Temp.— S. R. 4.31 S. S. 7.24 W—	10 MONDAY Temp.— S. R. 4.28 S. S. 7.30 W—
3 MONDAY Temp.— S. R. 4.30 S. S. 7.25 W—	11 TUESDAY Temp.— S. R. 4.28 S. S. 7.30 W—
4 TUESDAY Temp.— S. R. 4.30 S. S. 7.26 W—	12 WEDNESDAY Temp.— S. R. 4.28 S. S. 7.31 W—
5 WEDNESDAY Temp.— S. R. 4.30 S. S. 7.27 W—	13 THURSDAY Temp.— S. R. 4.28 S. S. 7.31 W—
6 THURSDAY Temp.— S. R. 4.29 S. S. 7.27 W—	14 FRIDAY Temp.— S. R. 4.28 S. S. 7.32 W—
7 FRIDAY Temp.— S. R. 4.29 S. S. 7.28 W—	15 SATURDAY Temp.— S. R. 4.28 S. S. 7.32 W—
8 SATURDAY Temp.— S. R. 4.29 S. S. 7.28 W—	16 SUNDAY Temp.— S. R. 4.28 S. S. 7.32 W—

Timely Farm Work—Grain harvest is at hand. Success in this work demands very prompt attention in cutting each crop as it is ready. Be sure you have plenty of labor available. Rush your work now if ever in the year. All growing crops must be carefully cultivated. Give young chicks careful attention. Harvest early vegetables and thin the larger fruits. In the south, small grains must all be harvested and tobacco will demand careful attention.

17 MONDAY Temp. — S. R. 4.28 S. S. 7.33 W —	25 TUESDAY Temp. — S. R. 4.29 S. S. 7.35 W —
18 TUESDAY Temp. — S. R. 4.28 S. S. 7.33 W —	26 WEDNESDAY Temp. — S. R. 4.30 S. S. 7.35 W —
19 WEDNESDAY Temp. — S. R. 4.28 S. S. 7.33 W —	27 THURSDAY Temp. — S. R. 4.30 S. S. 7.35 W —
20 THURSDAY Temp. — S. R. 4.28 S. S. 7.34 W —	28 FRIDAY Temp. — S. R. 4.30 S. S. 7.35 W —
21 FRIDAY Temp. — S. R. 4.28 S. S. 7.34 W —	29 SATURDAY Temp. — S. R. 4.31 S. S. 7.35 W —
22 SATURDAY Temp. — S. R. 4.29 S. S. 7.34 W —	30 SUNDAY Temp. — S. R. 4.31 S. S. 7.35 W —
23 SUNDAY Temp. — S. R. 4.29 S. S. 7.34 W —	Vacation time is near at hand, and while the older folks will be very busy, the boys and girls can spend their time to advantage getting subscribers for Farm and Home.
24 MONDAY Temp. — S. R. 4.29 S. S. 7.35 W —	Our guarantee is a strong one. You cannot lose if you patronize the advertisers in Farm and Home, providing you say, "I saw your adv. in Farm and Home."

1907

JULY

Last Qtr
2ndNew
10th

Weather Averages—This month is one of the driest on the Pacific coast and over the Northern plateau region. In Arizona and New Mexico it is the wettest period of the year. From the Rocky mountains to the Atlantic coast the month is marked by heavy rainfall usually in showers and thunderstorms of short duration. Frosts are uncommon in this month except in high altitudes. Extended periods of very hot weather may be expected in any section.

I MONDAY Temperature— Sunrise 4.32 Sunset 7.35 Weather—	9 TUESDAY Temp.— S. R. 4.37 S. S. 7.33 W—
2 TUESDAY Temp.— S. R. 4.32 S. S. 7.35 W—	10 WEDNESDAY Temp.— S. R. 4.37 S. S. 7.33 W—
3 WEDNESDAY Temp.— S. R. 4.33 S. S. 7.35 W—	11 THURSDAY Temp.— S. R. 4.38 S. S. 7.32 W—
4 THURSDAY Temp.— S. R. 4.33 S. S. 7.34 W—	12 FRIDAY Temp.— S. R. 4.38 S. S. 7.32 W—
5 FRIDAY Temp.— S. R. 4.34 S. S. 7.34 W—	13 SATURDAY Temp.— S. R. 4.39 S. S. 7.32 W—
6 SATURDAY Temp.— S. R. 4.34 S. S. 7.34 W—	14 SUNDAY Temp.— S. R. 4.40 S. S. 7.31 W—
7 SUNDAY Temp.— S. R. 4.35 S. S. 7.34 W—	15 MONDAY Temp.— S. R. 4.40 S. S. 7.31 W—
8 MONDAY Temp.— S. R. 4.36 S. S. 7.33 W—	16 TUESDAY Temp.— S. R. 4.41 S. S. 7.30 W—

1st Qtr
18thFull 24th
Last Qtr 31st

JULY

1907

Timely Farm Work—The completion of the grain and hay harvest will demand attention this month. Finish thinning tree fruits. Keep the cultivator going in the corn and other hoed crops to prevent weeds and retain moisture during drouths. After early vegetables are done, fit the ground for later crops at once. Live stock will need little attention, but do not graze pastures too heavily. In the south, planting is completed and harvest of later crops begins.

17

WEDNESDAY

Temp. — S. R. 4.42 S. S. 7.29 W. —

18

THURSDAY

Temp. — S. R. 4.43 S. S. 7.29 W. —

19

FRIDAY

Temp. — S. R. 4.43 S. S. 7.28 W. —

20

SATURDAY

Temp. — S. R. 4.44 S. S. 7.27 W. —

21

SUNDAY

Temp. — S. R. 4.45 S. S. 7.27 W. —

22

MONDAY

Temp. — S. R. 4.46 S. S. 7.26 W. —

23

TUESDAY

Temp. — S. R. 4.47 S. S. 7.25 W. —

24

WEDNESDAY

Temp. — S. R. 4.48 S. S. 7.24 W. —

25

THURSDAY

Temp. — S. R. 4.48 S. S. 7.23 W. —

26

FRIDAY

Temp. — S. R. 4.49 S. S. 7.22 W. —

27

SATURDAY

Temp. — S. R. 4.50 S. S. 7.22 W. —

28

SUNDAY

Temp. — S. R. 4.51 S. S. 7.21 W. —

29

MONDAY

Temp. — S. R. 4.52 S. S. 7.20 W. —

30

TUESDAY

Temp. — S. R. 4.53 S. S. 7.19 W. —

31

WEDNESDAY

Temp. — S. R. 4.54 S. S. 7.18 W. —

If you see it in the Farm and Home it's so.

Our Guarantee protects you.

Our editors will answer your questions.

1907

AUGUST

New
9th1st Qtr
16th

Weather Averages—The hurricane season begins in the Gulf and West Indies region. Rainfall is light from the Rocky mountains to the Pacific coast except over western Texas, New Mexico and Arizona. Heavy thunderstorms occur over the north and middle Atlantic states. Between the Rocky mountains and the Mississippi valley the month is usually dry. Severe wind storms seldom occur in any of the central states near the Great lakes on Atlantic coast.

I THURSDAY. Temperature— Sunrise 4.55 Sunset 7.17 Weather—	9 FRIDAY Temp.— S. R. 5.03 S. S. 7.08 W—
2 FRIDAY Temp.— S. R. 4.56 S. S. 7.16 W—	10 SATURDAY Temp.— S. R. 5.04 S. S. 7.06 W—
3 SATURDAY Temp.— S. R. 4.57 S. S. 7.15 W—	11 SUNDAY Temp.— S. R. 5.05 S. S. 7.05 W—
4 SUNDAY Temp.— S. R. 4.58 S. S. 7.14 W—	12 MONDAY Temp.— S. R. 5.05 S. S. 7.04 W—
5 MONDAY Temp.— S. R. 4.59 S. S. 7.12 W—	13 TUESDAY Temp.— S. R. 5.06 S. S. 7.02 W—
6 TUESDAY Temp.— S. R. 5.00 S. S. 7.11 W—	14 WEDNESDAY Temp.— S. R. 5.07 S. S. 7.01 W—
7 WEDNESDAY Temp.— S. R. 5.01 S. S. 7.10 W—	15 THURSDAY Temp.— S. R. 5.08 S. S. 7.00 W—
8 THURSDAY Temp.— S. R. 5.02 S. S. 7.09 W—	16 FRIDAY Temp.— S. R. 5.09 S. S. 6.58 W—

Full
23th

Last Qtr
30th

AUGUST

1907

Timely Farm Work—This month will be the most leisurely during the entire crop season. Plan to take a vacation. Surface cultivation of growing crops should not be neglected. Watch water supplies in pastures and do not graze the land too close. Look over the farm carefully and repair tools, fences, drains, buildings, etc. Sow any early forage needed for fall pastures. In the south, preparation for cotton picking should be made.

17 SATURDAY Temp. — S. R. 5.10 S. S. 6.57 W. —	25 SUNDAY Temp. — S. R. 5.18 S. S. 6.45 W. —
18 SUNDAY Temp. — S. R. 5.11 S. S. 6.55 W. —	26 MONDAY Temp. — S. R. 5.19 S. S. 6.44 W. —
19 MONDAY Temp. — S. R. 5.12 S. S. 6.54 W. —	27 TUESDAY Temp. — S. R. 5.20 S. S. 6.42 W. —
20 TUESDAY Temp. — S. R. 5.13 S. S. 6.53 W. —	28 WEDNESDAY Temp. — S. R. 5.21 S. S. 6.41 W. —
21 WEDNESDAY Temp. — S. R. 5.14 S. S. 6.51 W. —	29 THURSDAY Temp. — S. R. 5.22 S. S. 6.39 W. —
22 THURSDAY Temp. — S. R. 5.15 S. S. 6.50 W. —	30 FRIDAY Temp. — S. R. 5.23 S. S. 6.37 W. —
23 FRIDAY Temp. — S. R. 5.16 S. S. 6.48 W. —	31 SATURDAY Temp. — S. R. 5.24 S. S. 6.36 W. —
24 SATURDAY Temp. — S. R. 5.17 S. S. 6.47 W. —	\$1.00 pays for three years' subscription to Farm and Home and the 1907 Calendar. Better send \$1.00 today for its big value.

1907

SEPTEMBER

New 7th  1st Qtr 14th

Weather Averages—The hurricane season is at its height in the tropical districts. Rains become general in states east of the Mississippi river, and heavy rains occur in the South Atlantic and in the East Gulf states. Light rainfall may be expected in the great plains west of the Mississippi. Frosts are likely to occur during the last half of the month in the northwestern states, New England, the Ohio valley and Tennessee.

I SUNDAY Temperature— Sunrise 5.25 Sunset 6.34 Weather—	9 MONDAY Temp.— S. R. 5.33 S. S. 6.21 W—
2 MONDAY Temp.— S. R. 5.26 S. S. 6.32 W—	10 TUESDAY Temp.— S. R. 5.34 S. S. 6.19 W—
3 TUESDAY Temp.— S. R. 5.27 S. S. 6.31 W—	11 WEDNESDAY Temp.— S. R. 5.35 S. S. 6.18 W—
4 WEDNESDAY Temp.— S. R. 5.28 S. S. 6.29 W—	12 THURSDAY Temp.— S. R. 5.36 S. S. 6.16 W—
5 THURSDAY Temp.— S. R. 5.29 S. S. 6.28 W—	13 FRIDAY Temp.— S. R. 5.37 S. S. 6.15 W—
6 FRIDAY Temp.— S. R. 5.30 S. S. 6.27 W—	14 SATURDAY Temp.— S. R. 5.38 S. S. 6.13 W—
7 SATURDAY Temp.— S. R. 5.31 S. S. 6.25 W—	15 SUNDAY Temp.— S. R. 5.39 S. S. 6.11 W—
8 SUNDAY Temp.— S. R. 5.32 S. S. 6.23 W—	16 MONDAY Temp.— S. R. 5.40 S. S. 6.09 W—

Full 21st  Last Qtr 29th 

SEPTEMBER

1907

Timely Farm Work—Fruit harvest will occupy the main attention. Peaches, plums and grapes should be rushed to market or placed in cold storage for later sale. Quinces should be picked. Dig potatoes which are fully ripened, as will be shown by dead tops. Rush tomatoes to the market or factory if frost threatens. In the south, cotton picking and the harvest of vegetables and fruits will occupy attention. Tobacco harvest will be finished.

17 TUESDAY Temp. — S. R. 5.41 S. S. 6.08 Weather —	25 WEDNESDAY Temp. — S. R. 5.49 S. S. 5.55 W —
18 WEDNESDAY Temp. — S. R. 5.42 S. S. 6.06 W —	26 THURSDAY Temp. — S. R. 5.50 S. S. 5.53 W —
19 THURSDAY Temp. — S. R. 5.43 S. S. 6.05 W —	27 FRIDAY Temp. — S. R. 5.51 S. S. 5.51 W —
20 FRIDAY Temp. — S. R. 5.44 S. S. 6.03 W —	28 SATURDAY Temp. — S. R. 5.52 S. S. 5.49 W —
21 SATURDAY Temp. — S. R. 5.45 S. S. 6.01 W —	29 SUNDAY Temp. — S. R. 5.53 S. S. 5.48 W —
22 SUNDAY Temp. — S. R. 5.46 S. S. 5.59 W —	30 MONDAY Temp. — S. R. 5.54 S. S. 5.46 W —
23 MONDAY Temp. — S. R. 5.47 S. S. 5.58 W —	Now is a good time to renew your subscription and order the Farm and Home Calendar for 1908. It will be better than ever. You are sure to want it so order now.
24 TUESDAY Temp. — S. R. 5.48 S. S. 5.56 W —	Use your spare time in working for the betterment of your locality. A good way to do this is to get more of your neighbors to read Farm and Home. We will gladly supply sample copies.

1907

OCTOBER

New
7th1st Qtr
14th

Weather Averages—The heavy storm season in the south will end this month. On the Pacific coast the wet season begins and rain becomes more general over the middle and northern plateau region. Light rains may be expected in the Rocky mountain and central plains district. In the Mississippi valley, rainfall will be light and severe frosts are likely to occur as far south as the Gulf states.

I TUESDAY Temperature— Sunrise 5.55 Sunset 5.44 Weather—	9 WEDNESDAY Temp.— S. R. 6.03 S. S. 5.31 W—
2 WEDNESDAY Temp.— S. R. 5.56 S. S. 5.42 W—	10 THURSDAY Temp.— S. R. 6.04 S. S. 5.29 W—
3 THURSDAY Temp.— S. R. 5.57 S. S. 5.41 W—	11 FRIDAY Temp.— S. R. 6.05 S. S. 5.28 W—
4 FRIDAY Temp.— S. R. 5.58 S. S. 5.39 W—	12 SATURDAY Temp.— S. R. 6.06 S. S. 5.26 W—
5 SATURDAY Temp.— S. R. 5.59 S. S. 5.38 W—	13 SUNDAY Temp.— S. R. 6.07 S. S. 5.25 W—
6 SUNDAY Temp.— S. R. 6.00 S. S. 5.36 W—	14 MONDAY Temp.— S. R. 6.08 S. S. 5.23 W—
7 MONDAY Temp.— S. R. 6.01 S. S. 5.35 W—	15 TUESDAY Temp.— S. R. 6.10 S. S. 5.22 W—
8 TUESDAY Temp.— S. R. 6.02 S. S. 5.33 W—	16 WEDNESDAY Temp.— S. R. 6.11 S. S. 5.20 W—

Full
21stLast Qtr
29th

OCTOBER

1907

Timely Farm Work—The harvest of corn, fruits and garden stuff must be almost completed this month. Pumpkins, late winter apples and late potatoes may be left to be cared for next month. Get the corn all into the shock or silo so that it will be well cured before the snows come. Prepare for winter in the small fruit garden by protecting plants with straw or leaves. In the south, cotton and corn harvest must be pushed rapidly. Cut and grind cane.

17 THURSDAY Temp. — S. R. 6.12 S. S. 5.19 W —	25 FRIDAY Temp. — S. R. 6.20 S. S. 5.07 W —
18 FRIDAY Temp. — S. R. 6.13 S. S. 5.17 W —	26 SATURDAY Temp. — S. R. 6.22 S. S. 5.06 W —
19 SATURDAY Temp. — S. R. 6.14 S. S. 5.16 W —	27 SUNDAY Temp. — S. R. 6.23 S. S. 5.05 W —
20 SUNDAY Temp. — S. R. 6.15 S. S. 5.14 W —	28 MONDAY Temp. — S. R. 6.24 S. S. 5.04 W —
21 MONDAY Temp. — S. R. 6.16 S. S. 5.13 W —	29 TUESDAY Temp. — S. R. 6.25 S. S. 5.02 W —
22 TUESDAY Temp. — S. R. 6.17 S. S. 5.11 W —	30 WEDNESDAY Temp. — S. R. 6.26 S. S. 5.00 W —
23 WEDNESDAY Temp. — S. R. 6.18 S. S. 5.10 W —	31 THURSDAY Temp. — S. R. 6.27 S. S. 4.59 W —
24 THURSDAY Temp. — S. R. 6.19 S. S. 5.09 W —	Our New Premium List for 1907-8 is ready this month. Send for it. It's free.

1907

NOVEMBER

New
5th1st Qtr
12th

Weather Averages—The rainfall increases during this month on the Pacific coast and in the Rocky mountain region, while in Montana it is the driest month of the year. East of the Rocky mountains in the Mississippi valley and Atlantic states rainfall will grow less, occasional heavy freezes and snows occurring. Lower temperature will prevail throughout the New England states and on the Atlantic coast.

I FRIDAY Temperature— Sunrise 6.28 Sunset 4.58 Weather—	9 SATURDAY Temp.— S. R. 6.38 S. S. 4.49 W—
2 SATURDAY Temp.— S. R. 6.30 S. S. 4.57 W—	10 SUNDAY Temp.— S. R. 6.39 S. S. 4.48 W—
3 SUNDAY Temp.— S. R. 6.31 S. S. 4.56 W—	11 MONDAY Temp.— S. R. 6.41 S. S. 4.47 W—
4 MONDAY Temp.— S. R. 6.32 S. S. 4.55 W—	12 TUESDAY Temp.— S. R. 6.42 S. S. 4.46 W—
5 TUESDAY Temp.— S. R. 6.33 S. S. 4.53 W—	13 WEDNESDAY Temp.— S. R. 6.43 S. S. 4.45 W—
6 WEDNESDAY Temp.— S. R. 6.35 S. S. 4.52 W—	14 THURSDAY Temp.— S. R. 6.44 S. S. 4.44 W—
7 THURSDAY Temp.— S. R. 6.36 S. S. 4.51 W—	15 FRIDAY Temp.— S. R. 6.45 S. S. 4.43 W—
8 FRIDAY Temp.— S. R. 6.37 S. S. 4.50 W—	16 SATURDAY Temp.— S. R. 6.46 S. S. 4.43 W—

Full
19th



Last Qtr
27th

NOVEMBER

1907

Timely Farm Work—Harvest must be finished this month. Root crops, fruits, garden truck, etc. must be prepared for winter quarters. Sow grass seed and winter rye before the ground freezes. Finish fall breaking. Clean up the greenhouse and start the fires. Protect plants with straw mats, etc. Put everything out of reach of frost. Prepare winter quarters for your live stock. In the south, cotton picking will be finished and winter grains will be sown.

17

SUNDAY

Temp. — S. R. 6.48 S. S. 4.42 Weather —

18

MONDAY

Temp. — S. R. 6.49 S. S. 4.41 W —

19

TUESDAY

Temp. — S. R. 6.50 S. S. 4.40 W —

20

WEDNESDAY

Temp. — S. R. 6.51 S. S. 4.40 W —

21

THURSDAY

Temp. — S. R. 6.52 S. S. 4.39 W —

22

FRIDAY

Temp. — S. R. 6.54 S. S. 4.38 W —

23

SATURDAY

Temp. — S. R. 6.55 S. S. 4.38 W —

24

SUNDAY

Temp. — S. R. 6.56 S. S. 4.37 W —

25

MONDAY

Temp. — S. R. 6.57 S. S. 4.37 W —

26

TUESDAY

Temp. — S. R. 6.58 S. S. 4.37 W —

27

WEDNESDAY

Temp. — S. R. 6.59 S. S. 4.36 W —

28

THURSDAY

Temp. — S. R. 7.00 S. S. 4.36 W —

29

FRIDAY

Temp. — S. R. 7.01 S. S. 4.35 W —

30

SATURDAY

Temp. — S. R. 7.02 S. S. 4.35 W —

November is one of the very best months to secure subscribers for Farm and Home, and as you will soon be selecting your Christmas gifts you had better send for Our New Premium List.

If your subscription runs out within the next two or three months, it would be well to renew now so as to insure your not missing a single copy of the paper. Why not send \$1 for three year's subscription and the Calendar?

1907

DECEMBER

New
5th1st Qtr
11th

Weather Averages—The rainy season will be at its height on the Pacific coast and much rainfall will be noted in the central and mountain states. In the Mississippi valley, rainfall may be very short. Severe freezes are likely to occur for short periods over any part of the United States except the extreme south of Florida. Heavy snows are not probable, but the rain fall will be considerable in the Atlantic states.

I SUNDAY Temperature— Sunrise 7.03 Sunset 3.34 Weather—	9 MONDAY Temp.— S. R. 7.11 S. S. 4.33 W—
2 MONDAY Temp.— S. R. 7.04 S. S. 4.34 W—	10 TUESDAY Temp.— S. R. 7.12 S. S. 4.33 W—
3 TUESDAY Temp.— S. R. 7.05 S. S. 4.33 W—	11 WEDNESDAY Temp.— S. R. 7.13 S. S. 4.33 W—
4 WEDNESDAY Temp.— S. R. 7.06 S. S. 4.33 W—	12 THURSDAY Temp.— S. R. 7.14 S. S. 4.33 W—
5 THURSDAY Temp.— S. R. 7.07 S. S. 4.33 W—	13 FRIDAY Temp.— S. R. 7.15 S. S. 4.33 W—
6 FRIDAY Temp.— S. R. 7.08 S. S. 4.33 W—	14 SATURDAY Temp.— S. R. 7.15 S. S. 4.33 W—
7 SATURDAY Temp.— S. R. 7.09 S. S. 4.33 W—	15 SUNDAY Temp.— S. R. 7.16 S. S. 4.34 W—
8 SUNDAY Temp.— S. R. 7.10 S. S. 4.33 W—	16 MONDAY Temp.— S. R. 7.17 S. S. 4.34 W—

Full
19thLast Qtr
27th

DECEMBER

1907

Timely Farm Work—Now is the time to sum up the work of the year and find out the profits which have been made. Take an inventory of your stock and see where you have had an increase or decrease. Look carefully after stock, examining each individual daily. Provide a good supply of wood and look carefully to the marketing of crops. In the south, the planting season will end and winter jobs will be at hand. Tobacco must be stripped and graded.

17

TUESDAY

Temp. — S. R. 7.13 S. S. 4.34 Weather —

25

WEDNESDAY

Temp. — S. R. 7.22 S. S. 4.38 W —

18

WEDNESDAY

Temp. — S. R. 7.18 S. S. 4.34 W —

26

THURSDAY

Temp. — S. R. 7.22 S. S. 4.38 W —

19

THURSDAY

Temp. — S. R. 7.19 S. S. 4.35 W —

27

FRIDAY

Temp. — S. R. 7.23 S. S. 4.39 W —

20

FRIDAY

Temp. — S. R. 7.20 S. S. 4.35 W —

28

SATURDAY

Temp. — S. R. 7.23 S. S. 4.40 W —

21

SATURDAY

Temp. — S. R. 7.20 S. S. 4.36 W —

29

SUNDAY

Temp. — S. R. 7.24 S. S. 4.40 W —

22

SUNDAY

Temp. — S. R. 7.21 S. S. 4.36 W —

30

MONDAY

Temp. — S. R. 7.24 S. S. 4.41 W —

23

MONDAY

Temp. — S. R. 7.21 S. S. 4.37 W —

31

TUESDAY

Temp. — S. R. 7.24 S. S. 4.42 W —

24

TUESDAY

Temp. — S. R. 7.22 S. S. 4.37 W —

What better Christmas present than a three year's subscription to Farm and Home? This would be a dollar well spent and sure to be appreciated.

HOW TO KEEP FARM ACCOUNTS

A Simple Account System

It has long been acknowledged that without a complete set of accounts no farmer can expect to be entirely successful as such, and while methods vary greatly the essential features are that a record of each important transaction be put down in such manner that it may be clearly understood when read some months or years later. A good farm account must be: 1. A complete record. 2. Accurate in every detail. 3. Properly entered.

How to Work This System

In the system here outlined an account is kept with such classes of live stock or kind of crop as are separate and distinct sources of expense and income. A cash account is kept separate from these accounts. The simple rules of accounting are applied to each separately, without respect to the farm as a whole. In the summary the losses or gains of each crop or class of live stock are assembled and the total loss or gain of the entire farming operation thus determined.

As illustrated below in specimen account, all that the crop or class of live stock costs the farmer, whether in money or labor, is debited, and all that it brings him, whether in cash or in increased value of soils or herds, is credited. The difference between these two amounts, which are kept in separate columns, shows the loss or gain from the crop or class of live stock. This simple rule must be kept clearly in mind that the account may be accurate at the end of the year. Estimate the loss and gain as has been shown in the specimen account.

What Accounts to Keep

It will suit the average farmer best to keep accounts with all crops or classes of live stock which he keeps on the farm for profit. If any stock is kept simply for home luxuries, such as one cow for milk, a horse for driving, a pig for home meat supply, usually no account will be necessary, as there will be but few items to enter for such an animal and they will all be on the cost side of the account.

The Cash Account

This book is the most important of the whole set and should show at any time the total amount of cash paid out and received, with the date and item for each. It will be a place for entries of all expenses and incomes not included in the other accounts. No cash received for a crop or live stock that has a separate account need be entered in the cash account if it is properly entered in another department, unless you wish to make your cash account complete and to have it show all incomes and outgoes.

Points to Keep in Mind

1. Make every record if possible on the day in which the transaction occurs; otherwise you may forget some detail that is important.
2. Be sure to mention all the facts in connection with each entry.
3. Don't let the book relapse expecting to work it up on some rainy day. You won't remember half the items.
4. Keep the book clean and neat. Use a pen or a sharp, hard pencil.

SPECIMEN CROP ACCOUNT

Account, Wheat		Fields, north	Acres 20	Debit	Credit
1905					
Oct.	1	To man and team 20 days plowing 30 acres land		\$40.00	
"	10	9 days preparing land		18.00	
"	15	40 bu. seed wheat at \$1.00		40.00	
"	"	4 days drilling		8.00	
1906					
June	26	6 men and team 3 days cutting		21.00	
Aug.	20	Threshing 450 bu. wheat		18.00	
"	"	15 men threshing 1 day		20.00	
"	"	Hauling wheat to barn		20.00	
"	"	Hauling wheat to market		5.00	
Sept	1	Sold 400 bu. wheat			\$400.00
"	"	50 bu. for seed			50.00
		Totals.....		\$190.00	\$450.00
		Expense deducted.....			190.00
		Profits.....			\$260.00

At a certain date each year (between Jan. 1 and May 1 is best) make a full list of everything you own, and also everything that is owing to you. Put on each item a fair valuation. Add these values together and the total shows total value of your assets. Then make a list of everything that you owe, the total of which is your liabilities. By comparing this year's inventory with last year's you will see at a glance what you gained or lost during the year.

<i>Description</i>	<i>Value</i>	<i>Money Owed To</i>
Horses		
Cows		
Enumerate all other things on hand in same way.		 Enumerate any other obligations.
Total value of all assets.		 Total liabilities Total assets Deducting liabilities from assets leaves As value of my estate when all claims against it are settled.

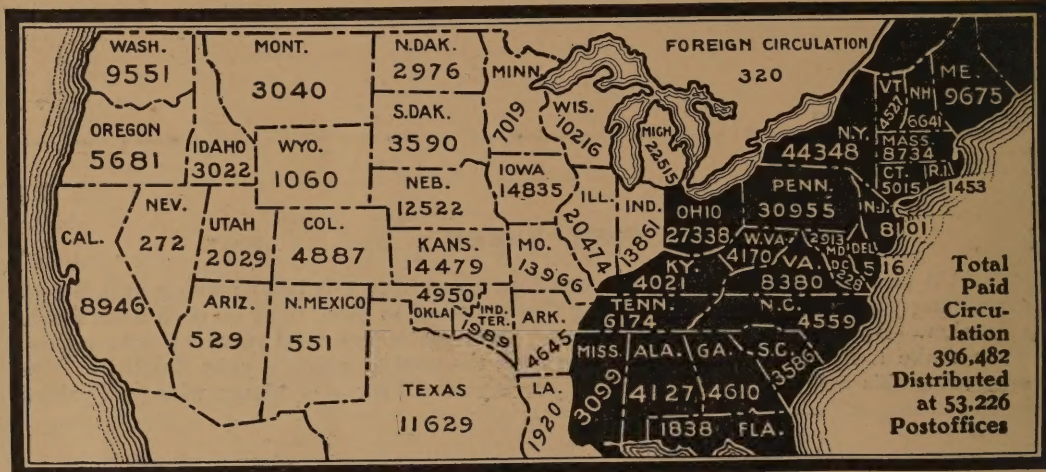
The Acknowledged Leader

The unbounded popularity of Farm and Home is evidenced by its immense circulation—the largest of any journal of its class in the world. Its three great editions, Eastern, Western and Southern thoroughly cover the entire country as shown by the map below. It is the one great national farm and family journal with a guaranteed circulation each issue of 425,000 copies. It thus reaches at the usual average

OVER TWO MILLION READERS

Farm and Home is valuable alike to the farmer, gardener, breeder, dairyman, poultryman, fruitgrower, housewife and the boys and girls, all of whom will find something of interest in each and everyone of the twenty-four numbers included in a year's subscription.

This map shows the distribution of the subscribers to Farm and Home, as per count of subscription list, June 1, 1906. The Western Edition territory is shown by the light printing, the Eastern Edition by the dark printing



Farmers can make money by advertising

Use Farm and Home's Little Ad Department which is conducted especially for the benefit of our subscribers. Lots of "our folks" have advertised in these Little Ads and made money by them.

Everyone has something to advertise at some time or other if he only stops to think. How many articles there are in woodsheds, lofts, lumber rooms—implements, tools, vehicles, farm machinery and even furniture—that have not been used perhaps for months, and which have been replaced by more modern and serviceable things; but whose days of usefulness are by no means over, and which would be eagerly bought by people who have to economize, but who perhaps have just the place for something that you can no longer find use for.

If you've perfected some breed of animals, poultry, or some particular variety of plant, vegetable or fruit, you can make a big sum by advertising in the Little Ad Department.

Most of our readers open their papers at the classified ads

The value of advertising by the farmer himself is more appreciated today than ever before, the up-to-date agriculturist naturally turns to the advertising columns of his farm paper when he wants live stock, seeds, implements or hired man.

How to Write an Ad

First of all tell the truth. If the article you are advertising is *not* in first class condition, do not say that it is; but rather say in fair condition.

Second, be brief, but to the point. Read over your ad and see if you could not say the same thing just as well in fewer words. Tell the things the purchasers would be most likely to want to know, tell about the *quality* of the article.

Be sure to give names, dimensions, prices.

In other words tell all the things you would want to know if you were the intending purchaser. If your article is of a well known make or has a trade-mark, or a familiar name by which it is known, be sure to mention that.

Write Just as You Would Talk

To anyone you are trying to sell something to, never mind the grammar but say what you actually feel,

then sign your full name and address. Write very plainly, particularly your name and address and the prices, and write on *only one side* of the paper.

The Cost

Is 10c. per word for each insertion in either eastern or western editions of Farm and Home alone; or 20c. per word for each insertion in both editions combined. The name and address is charged for, and *cash must accompany the order.*

You can figure the cost yourself. Just count the number of words, including your name and address, counting each initial and abbreviation as a word, and then multiply the number of words by 10c.

Send your copy and remittance addressed to the Advertising Department Farm and Home, Springfield, Mass., or Chicago office, whichever is nearest to you.

1908 CALENDAR 1908																											
JAN.							FEB.							MAR.							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	1	2	3	4	5	6	..	1	2	3	4	5	6	..	1	2	3	4	5	6	..	1	2	3	4	5	6
7	8	9	10	11	12	13	7	8	9	10	11	12	13	7	8	9	10	11	12	13	7	8	9	10	11	12	13
14	15	16	17	18	19	20	14	15	16	17	18	19	20	14	15	16	17	18	19	20	14	15	16	17	18	19	20
21	22	23	24	25	26	27	21	22	23	24	25	26	27	21	22	23	24	25	26	27	21	22	23	24	25	26	27
28	29	30	31				28	29	30	31				28	29	30	31				28	29	30	31			
JULY							AUG.							SEPT.							OCT.						
1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7
8	9	10	11	12	13	14	8	9	10	11	12	13	14	8	9	10	11	12	13	14	8	9	10	11	12	13	14
15	16	17	18	19	20	21	15	16	17	18	19	20	21	15	16	17	18	19	20	21	15	16	17	18	19	20	21
22	23	24	25	26	27	28	22	23	24	25	26	27	28	22	23	24	25	26	27	28	22	23	24	25	26	27	28
29	30	31					29	30	31					29	30	31					29	30	31				
NOV.							DEC.							JAN.							FEB.						
1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7
8	9	10	11	12	13	14	8	9	10	11	12	13	14	8	9	10	11	12	13	14	8	9	10	11	12	13	14
15	16	17	18	19	20	21	15	16	17	18	19	20	21	15	16	17	18	19	20	21	15	16	17	18	19	20	21
22	23	24	25	26	27	28	22	23	24	25	26	27	28	22	23	24	25	26	27	28	22	23	24	25	26	27	28
29	30	31					29	30	31					29	30	31					29	30	31				

1907 COUNTING ROOM CALENDAR. 1907

JANUARY

S	M	T	W	T	F	S
--	--	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	--	--

MAY

S	M	T	W	T	F	S
--	--	--	121	122	123	124
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	--

SEPTEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	--	--	--	--	--

FEBRUARY

S	M	T	W	T	F	S
--	--	--	--	--	32	33
34	35	36	37	38	39	40
41	42	43	44	45	46	47
48	49	50	51	52	53	54
55	56	57	58	59	--	--

JUNE

S	M	T	W	T	F	S
--	--	--	--	--	--	152
153	154	155	156	157	158	159
160	161	162	163	164	165	166
167	168	169	170	171	172	173
174	175	176	177	178	179	180

OCTOBER

S	M	T	W	T	F	S
--	--	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	--	--

MARCH

S	M	T	W	T	F	S
--	--	--	--	--	60	61
62	63	64	65	66	67	68
69	70	71	72	73	74	75
76	77	78	79	80	81	82
83	84	85	86	87	88	89

JULY

S	M	T	W	T	F	S
--	--	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	--	--

NOVEMBER

S	M	T	W	T	F	S
--	--	--	--	--	305	306
307	308	309	310	311	312	313
314	315	316	317	318	319	320
321	322	323	324	325	326	327
328	329	330	331	332	333	334

APRIL

S	M	T	W	T	F	S
--	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	--	--	--	--

AUGUST

S	M	T	W	T	F	S
--	--	--	--	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

DECEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	--	--	--	--